IronAge
a Chilton publication
One Decker Square ■ Bala-Cynwyd, Pa. 19004

Semi-Annual Index

January - June, 1972

Volume 209

Microfilm Copies

Complete microfilm copies of The IRON AGE, text and advertising, are available beginning with Vol. 161 (1948) through the issues covered in this index. For information write to University Microfilms, 313 N. First St., Ann Arbor, Mich.

SEMI-ANNUAL INDEX IRON AGE

January - June, 1972 Volume 209

SUBJECT

A

ASEA, Inc.:
Chromium Recovery Improved in Stainless Refining, June 8 p 59

Abrasives
See also: Carbides
Abrasives and Heat Simplify Cutting-Off of Steel Bars, June 22 p 55
A1 Transit Cars Given Textured Look by Scratch Brush, May 25 p 88
Can't Cut Hard Material? "Blast" it Away, Apr 13 p 63
Carbide Slitting: When it Works and Why, Feb 17 p 59
Fine Grain Super Tool Steels Make Fine Grinding Easier, Aug 20 p 90
New Tools from New Materials, by J. E. Sandford, Apr 13 p 59
Redesign in Carbide Guides Doubles Life of Honing Stones, by W. G. Patton, Jan 20 p 36

Acme-Cleveland Corp.:
Farm Area's New Crop-Factories, by K. W. Bennett, Feb 10 p 65
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87
Inventories: Recovery's Missing Link, by K. A. Kaufman, G. J. McManus and R. A. Wilson, June 8 p 44
What's Behind Machine Tool Curtain? by K. A. Kaufman and R. A. Wilson, June 8 p 46

Adaptive Control
A/C: Rare Bird that's Drawing a Crowd, by K. W. Bennett, May 4 p 65

Adcole Corp.:
Buick Sparks Efforts to Meet Emission Laws, by D. N. Williams, Feb 10 p 25

Adhesives
See Also: Bonding

Advance Pressure Castings Co.:
Does Your Company Keep its Know-How Secret? Wise Up, Jan 20 p 14

Aerospace
Aerospace Alloys March into New Markets, by D. C. Perry and R. R. Irving, Jan 13 p 49
The B-1: A New Approach to Building Planes, by W. G. Patton, June 15 p 59
Black Capitalism: Does it Really Work? by Samuel Pressley, June 15 p 50
ERTS: Resource Hunter from Outer Space, by C. J. Suchocki, June 29 p 29
F-14 Puts Advanced Technology to the Test, by R. R. Irving, June 15 p 55
Joining Processes Tackle Titanium for Aircraft Parts, June 8 p 31
Large Ti-Alloy Weldment to Go into Orbit, Mar 30 p 66
NR Works to Adapt Space Lore, by T. C. DuMond, Jan 13 p 55
Orbiter Material Takes 100 Cycles at 2500°F, Feb 17 p 27
President Says 'Blast Off' for Space Shuttle, by A. M. Greene, Jan 13 p 45
TRW Seeks Answer to Cost Squeeze in World's Largest Mechanical Forging Press, by R. A. Wilson, Feb 17 p 56
Technology Transfer Helps People and Products, Jan 13 p 56

Aerospace Industry
Aero Veto: Harbinger of the Hardline? Jan 13 p 21
Aerospace Alloys March into New Markets, by D. C. Perry and R. R. Irving, Jan 13 p 49
Defense Budget Needed Rx for Wheezing Aerospace, by G. J. McManus, Feb 3 p 43
NR Works to Adapt Space Lore, by T. C. DuMond, Jan 13 p 55
New Fiber Has Aircraft Industry Astir, by J. J. Obrzut, June 8 p 66
President Says 'Blast Off' for Space Shuttle, by A. M. Greene, Jan 13 p 45
Technology Transfer Helps People and Products, Jan 13 p 56

Airbags
VW on Safety: Air Bag, Nein; Gas Belt, Ya, by D. N. Williams, May 25 p 27
Will the Real Industry Safety Cop Please Stand! by D. N. Williams, June 29 p 64

Airco Alloys AB
From Sweden: Ferroalloys without Air Pollution, by R. R. Irving, June 15 p 44

Airco, Inc.:
From Sweden: Ferroalloys without Air Pollution, by R. R. Irving, June 15 p 44

Airco Welding Products Div.:
Positioners Take the Downtime of Welding, by R. R. Irving, Mar 30 p 60
Welding is a Domestic Affair, by D. N. Williams, Apr 20 p 74
What's Behind the Successful Drive for Silicone Parts? by W. G. Patton, May 25 p 84

Aircraft
The B-1: A New Approach to Building Planes, by W. G. Patton, June 15 p 59
F-14 Puts Advanced Technology to the Test, by R. R. Irving, June 15 p 55

Air Products and Chemicals, Inc.:
Cryogenics is Not a Fragment of Scrap's Imagination, by K. W. Bennett, May 18 p 47
NR Works to Adapt Space Lore, by T. C. DuMond, Jan 13 p 55

Ajax Hardware Co.:
Computers' Big Payoff for Small Businesses, by A. M. Greene, Mar 30 p 63

Ajax Magnothermic Corp.:
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87

Aktiebolaget Electrolux:
Population Explosion - Industrial Robot Style, by K. W. Bennett, May 25 p 67

Alcan Aluminum Ltd.:
Aluminum, Copper, Cadium-Talk About Prices, Dumping, by James Beizer, May 25 p 71
Aluminum Gets Set to Kiss the Bad Old Days Goodbye, by James Beizer, Apr 13 p 101
Aluminum Resets its Sights on 10 Pct a Year Growth Rate, by James Beizer, Mar 23 p 71
Warning Signals for Aluminum Start to Flicker, by James Beizer, Jan 20 p 25

Allegheny Ludlum Industries, Inc.:
Aluminum Stainless Prices: Going Down the Up Stairs, by James Beizer, May 11 p 41
Chromium Recovery Improved in Stainless Refining, June 8 p 59
Durables Catalogs Low: Time to Stock Up? by J. D. Baxter, Jan 13 p 42
Inventories: Recovery's Missing Link, by K. A. Kaufman, G. J. McManus and R. A. Wilson, June 8 p 44
Quotas: 'About the Best We Could Get', by G. J. McManus, Jan 20 p 28
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Steel Summary: 'Grand Tour' of Technology, by G. J. McManus, June 15 p 71
Steel Summary: Voluntary Quotas Harm Specialty Firms, Apr 13 p 99

Allegheny Ludlum Steel Corp.
SEE: Allegheny Ludlum Industries, Inc.

Allen-Bradley Co.:
Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50
Programmed Controls Spark New Era in Detroit, by J. E. Sandford, Feb 10 p 81

Alliance Tool & Die Corp.:
Iron Curtain Creaks Open for Tool, Die Work, by K. A. Kaufman, June 22 p 39

Allied Chemical Corp.:
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77

Allied Inventory
Unlock Dollars Frozen in Inventories, by K. W. Bennett, Apr 20 p 67

Allis Chalmers Mfg. Co.:
Bored Fine Wire Solves 'Cold Shut' Problems, by R. R. Irving, Feb 24 p 63

Alloys
Aerospace Alloys March into New Markets, by D. C. Perry and R. R. Irving, Jan 13 p 49
ASR Outperforms VAR in Making Superalloys, by T. C. DuMond, May 11 p 49
From Sweden: Ferroalloys without Air Pollution, by R. R. Irving, June 15 p 44
New Nodulizer Curbs Smoke Fumes for Ductile Iron, Mar 2 p 50
New Treatment Increases Toughness in Alloy Steels, June 8 p 61
Sail Speed Meter Poses Interesting Materials Problems, Jan 13 p 29
A Third Coated Steel is Ready to Roll, by R. R. Irving, June 1 p 52

Altemose Construction Co.:
Building Trades: 'God Bless America' and Kill the Scabs, June 29 p 23

Aluminum
Aluminum Honeycomb Survives DOT Crash Impact, Mar 9 p 54
Aluminum Hoods Catch GM's Eye for '74 Cadillac? by D. N. Williams, June 8 p 47
Aluminum Stainless Prices: Going Down the Up Stairs, by James Beizer, May 11 p 41
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52
Big Mill, Demand Boosts Aluminum Hopes for Year, by James Beizer, May 25 p 103
Canmaking's New Battleground: The D & I Process, by G. J. McManus, June 29 p 68
F-14 Puts Advanced Technology to the Test, by R. R. Irving, June 15 p 55
Giant Mill is Ready to Roll Aluminum Plate, May 18 p 29
Kaiser Trying for Better Prices on Aluminum, by James Beizer, Mar 16 p 123
Not All Reasons for Use of Aluminum are Light Weight, by James Beizer, Jan 13 p 65
Slot Welding Helps Aluminum Present Smooth Surface, Apr 13 p 66
Warning Signals for Aluminum Start to Flicker, by James Beizer, Jan 20 p 25

Aluminum Assn.:
Big Mill, Demand Boosts Aluminum Hopes for Year, by James Beizer, May 25 p 103

Aluminum Co. of America:
A1 Transit Cars Given Textured Look by Scratch Brush, May 25 p 88
Aluminum Saves More Hot Air than Critics Generate? by James Beizer, June 15 p 73
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52
Big Mill, Demand Boosts Aluminum Hopes for Year, by James Beizer, May 25 p 103
Giant Mill is Ready to Roll Aluminum Plate, May 18 p 29
Nonferrous '71: Crying All the way to the Bank, by James Beizer, Feb 17 p 45
Not All Reasons for Use of Aluminum are Light Weight, by James Beizer, Jan 13 p 65
Slot Welding Helps Aluminum Present Smooth Surface, Apr 13 p 66
When First Quarter Earnings are Like Democratic Primaries, by James Beizer, Apr 27 p 71

Aluminum Industry
Aluminum, Copper, Cadium-Talk About Prices, Dumping, by James Beizer, May 25 p 71
Aluminum Gets Set to Kiss the Bad Old Days Goodbye, by James Beizer, Apr 13 p 101
Aluminum Resets its Sights on 10 Pct a Year Growth Rate, by James Beizer, Mar 23 p 71
Aluminum Saves More Hot Air than Critics Generate? by James Beizer, June 15 p 73
Aluminum, Stainless Prices, Going Down the Up Stairs, by James Beizer, May 11 p 41
Big Mill, Demand Boosts Aluminum Hopes for Year, by James Beizer, May 25 p 103
Warning Signals for Aluminum Start to Flicker, by James Beizer, Jan 20 p 25

Amax Copper, Inc.:
Copper Alloy Formed Without Solution Anneal, Mar 23 p 29

Amax Specialty Metals Div.:
EB Welding Builds Melting Electrodes, Jan 20 p 39

American Assn. for the Advancement of Science
Working May be Hazardous to Your Health, by D. N. Williams, Jan 20 p 22

American Assn. of Railroads
Steel Can Rest Comfortably After Tank-Car Diagnosis, by C. J. Suchocki, May 25 p 72

American Bankers Assn.:
Pension Bill: Going Back into Retirement? by K. A. Kaufman, May 18 p 43

American Can Co.:
Canmaking's New Battleground: The D & I Process, by G. J. McManus, June 29 p 68
Dialogue Rapport or Task Forces to Deal with Youth? Jan 13 p 28
Industrial Buyers 'Policing' Price Moves, by G. J. McManus, Jan 20 p 24
The Price Controls Squeeze Play? by K. A. Kaufman, K. W. Bennett and G. J. McManus, May 11 p 35
Why Corporate Managers Need to Listen Well, Apr 13 p 27

American Ceramic Society
Ceramics Begin to Answer Industry's Burning Questions, by A. M. Greene, June 22 p 48

American Die Casting Institute
Does Your Company Keep its Know-How Secret? Wise Up, Jan 20 p 14
Zinc: My 'Bounty' Lies Over the Ocean? by James Beizer, Apr 13 p 48

American Die and Instrument Works, Inc.:
Buyers Now Seek Service, Not Inventories, by G. J. McManus, Feb 24 p 47

American Federation of Labor/CIO
And Now, the Politics of Matzoh Balls! Apr 6 p 43
Labor '72: Planning Bumps Demanding, by C. J. Suchocki, Jan 13 p 40
Meany Uses Price Panel to Grind Labor's Axe, Apr 6 p 19
Meany's Mutiny Seeks Political Bounty, Mar 30 p 19
Multinationals: Labor Finds No Help at Commerce, Feb 10 p 21
To OSHA from Labor: Happy Un-Birthday, by C. J. Suchocki, Apr 27 p 42

American Gildemeister Corp.:
Material Feeds Past the Tooling in New German Bar Machine, by B. D. Wakefield, May 25 p 88

American Home Assurance Co.:
Beware Liability Rabbit-Punch—it's Deadly, May 11 p 44

American Hospital Supply Corp.:
Job Market Starts to Crack Open, by K. W. Bennett, G. J. McManus, D. N. Williams and R. A. Wilson, Apr 27 p 37

American Iron and Steel Institute
He Says It's Hogwash and He's Sick of It, by Gene Beaudet, June 8 p 5
Steel Summary: 'Grand Tour' of Technology, by G. J. McManus, June 15 p 71
Steel Summary: Industry Loses the Blues, June 1 p 65

American Leisure Corp.:
Farm Area's New Crop-Factories, by K. W. Bennett, Feb 10 p 65

American Machine Tool Distributors' Assn.:
Machine Tool Market: Going, Going . . .., by Gene Beaudet and R. A. Wilson, Mar 30 p 50

American Management Assn.:
Every Manager Can Learn to Live with Phase II, Feb 10 p 29

American Metal Climax, Inc.:
Aluminum, Stainless Prices: Going Down the Up Stairs, by James Beizer, May 11 p 41
Copper Supply Outlook Gives Producers the Shakes, by James Beizer, May 18 p 83
Copper Waits, and Waits and Waits for a Better Economy, by James Beizer, Feb 3 p 71
EB Welding Builds Melting Electrodes, Jan 20 p 39
Nonferrous Chiefs See Improvement in Business Outlook, by James Beizer, May 11 p 73
Nonferrous '71: Crying All the Way to the Bank, by James Beizer, Feb 17 p 45

American Mining Congress
Will Mining Come Out of the Dark with a Truth Squad? by James Beizer, Jan 27 p 69

American Motors Corp.:
Car Interiors: All the Jazz is Moving to the Inside, by D. N. Williams, June 29 p 27
Dollar Devalued by Bored Workers, by J. M. Beattie, Feb 24 p 52

American Pullmax Co., Inc.:
Magazine Holds 72 Tools for NC Punching, by B. D. Wakefield, Jan 20 p 38

American Records Management Assn.:
Profit-Eating File Cabinets Must be Made to Heel, Apr 13 p 27

American Roller Bearing Co.:
Industry Opens its Purse, by G. J. McManus, Mar 23 p 39

American SMT Inc.:
Swedish Drill Fills Gap in U. S. Market, by B. D. Wakefield, Feb 24 p 62

American Safety Razor Co.:
Teflon Has a Knack for Solving Problems, by J. J. Obrzut, June 22 p 51

American Smelting & Refining Co.:
Asarco Feels the Teeth of Price Controls, by James Beizer, Apr 20 p 125
Asarco Leads Lead Price Increase, by James Beizer, Feb 10 p 121
Copper Comes a Cropper in Arizona Smelter Case, by James Beizer, Jan 27 p 48
Copper Supply Outlook Gives Producers the Shakes, by James Beizer, May 18 p 83
Copper Supply: When is Enough Not Enough? by James Beizer, Apr 20 p 125
Copper Waits, and Waits and Waits for a Better Economy, by James Beizer, Feb 3 p 71
Everybody Has to Lose Arizona Copper Case, by James Beizer, Jan 13 p 37
Nonferrous Earnings Plunge to Lowest Level in Years in Sluggish Economy, by James Beizer, Apr 27 p 45
Nonferrous '71: Crying All the Way to the Bank, by James Beizer, Feb 17 p 45
Pollution Hearings: Politics-2, Copper-1, by James Beizer, Mar 2 p 34
Pollution: Trade-off under Protest, by James Beizer, Feb 10 p 68
The Problems with Having a Smelter as a Neighbor, by James Beizer, Jan 20 p 47
What are the Price Prospects for Copper, Lead, Zinc? by James Beizer, June 29 p 109
Zinc: My 'Bounty' Lies Over the Ocean? by James Beizer, Apr 13 p 48
Zinc Revives Old Refrain on Price Controls, by James Beizer, Mar 23 p 45

American Society for Engineering Education
Teachers Working and Learning—in Industry? Jan 27 p 27
Design Show Will Concentrate on Promising New Technologies, Apr 27 p 64

American Society of Mechanical Engineers
Tomorrow's New Products, Today, by the Hunch Bunch, by K. W. Bennett, May 18 p 49

American Standard, Inc.:
Industries' Latest Problem—Profits, by G. J. McManus, Mar 30 p 45

American Statistical Assn.:
Crystal Ball '73: New Money Squeeze? by K. W. Bennett, June 29 p 63

American Telephone & Telegraph Co.:
The Cheapest Solution in Town . . ., by J. M. Beattie, Feb 3 p 39
Dollar Devalued by Bored Workers, by J. M. Beattie, Feb 24 p 52
When it Rains Information, Managers Stay Dry, Feb 24 p 27

American Textile Manufacturers Institute
Car Interiors: All the Jazz is Moving to the Inside, by D. N. Williams, June 29 p 27

American Trucking Assn.:
Nixon Trucking Bill: 'To Brink of Disaster and Beyond . . .'? by D. N. Williams, June 15 p 45

American Waagner-Biro Co.:
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77

Anaconda American Brass Co.:
Brass Mill, Aluminum Semi-Fab Prices Up, Jan 6 p 13
It's Price Change Time—and Phelps Dodge Does it Again, by James Beizer, Mar 2 p 65

Anaconda Co.:
Anaconda's Future Profits Out of Place? by James Beizer, Mar 30 p 55
Everybody Has to Lose Arizona Copper Case, by James Beizer, Jan 13 p 37
Nonferrous Earnings Plunge to Lowest Level in Years in Sluggish Economy, by James Beizer, Apr 27 p 45
Pollution Hearings: Politics-2, Copper-1, by James Beizer, Mar 2 p 34
Pollution: Trade-off under Protest, by James Beizer, Feb 10 p 68

Ann Arbor Computer Corp.:
Programmed Controls Sparks New Era in Detroit, by J. E. Sandford, Feb 10 p 81

Ansan Tool and Mfg. Co.:
Tool and Die: Starting on the Road Back, by R. A. Wilson, Jan 27 p 50

Appliances
Appliance Makers Caught with Inventories Down? by K. W. Bennett, Mar 2 p 32
Giants Go, but Small Wares Prosper, by K. W. Bennett, Mar 23 p 44

Arctic Enterprises, Inc.:
Mowers Cash in on 'Greening' in America, by K. W. Bennett, June 8 p 48

Argus Mfg. Co.:
The Price Controls Squeeze Play? by K. A. Kaufman, K. W. Bennett and G. J. McManus, May 11 p 35

Arizona
Copper Comes a Cropper in Arizona Smelter Case, by James Beizer, Jan 27 p 48
Everybody Has to Lose Arizona Copper Case, by James Beizer, Jan 13 p 37

Armco Steel Corp.:
Aerospace Alloys March into New Markets, by D. C. Perry and R. R. Irving, Jan 13 p 49
Armco: Generalist-Specialist Looks Ahead, by G. J. McManus, May 18 p 57
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77
I-F Steel Brings New Promise to Drawability, Jan 20 p 32
Job Market Starts to Crack Open, by K. W. Bennett, G. J. McManus, D. N. Williams and R. A. Wilson, Apr 27 p 37
The Price Controls Squeeze Play? by K. A. Kaufman, K. W. Bennett and G. J. McManus, May 11 p 35
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Steel Summary: 'Grand Tour' of Technology, by G. J. McManus, June 15 p 71

Aronson Machine Co.:
Positioners Take the Downtime Out of Welding, by R. R. Irving, Mar 30 p 60

Arvin Industries, Inc.:
The Dawning of a New Age of Electronics? by K. W. Bennett, Feb 3 p 40

Ashland Chemical Co.:
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87

Asia
Plant Costs aren't Far Out in Far East, by J. D. Baxter, May 25 p 76

Assn. of Data Processing Organizations
Maxis to Minis, Computers are Calculating Gains, by K. W. Bennett, May 11 p 39

Atlantic Richfield Co.:
When it Rains Information, Managers Stay Dry, Feb 24 p 27

Atlas Fabricators, Inc.:
Iron Curtain Creaks Open for Tool, Die Work, by K. A. Kaufman, June 22 p 39

Atomic Energy Commission

Coming: Electric Auto Courtesy the AEC? by J. M. Beattie and P. J. Cathey, Apr 27 p 41
There is No "Energy Crisis", But, . . ., by B. D. Wakefield, Mar 9 p 49

Australia

Australia Shakes Off Role as "Quarry for the World", by James Beizer, Apr 6 p 77

Automated Machinery Co.:

Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87

Automation

Ford Flat Rock Ready to Roll, by R. A. Wilson, Jan 27 p 58
Get it Together with Automatic Assembly, by R. A. Wilson, June 29 p 82
Increasing Output is Job for Machines,—Not People, by J. E. Sandford, Feb 10 p 71
Orderly Automation Needs Involvement of Top Management, May 4 p 83
Population Explosion - Industrial Robot Style, by K. W. Bennett, May 25 p 67
Those Wonderful Men and Their Amplifying Machines, by J. M. Beattie, May 25 p 67

Automation Enterprises Corp.:

Tool and Die: Starting on the Road Back, by R. A. Wilson, Jan 27 p 50

Automation for Industry, Inc.:

Increasing Output is for Job Machines,—Not People, by J. E. Sandford, Feb 10 p 71

Automobiles

Aluminum Honeycomb Survives DOT Crash Impact, Mar 9 p 54
Aluminum Hoods Catch GM's Eye for '74 Cadillac? by D. N. Williams, June 8 p 47
Auto Emission Control: Suppliers Heyday? by D. N. Williams, Apr 13 p 45
Auto Imports: Less Worrying and Buy U.S., by D. N. Williams and James Beizer, Apr 6 p 41
Auto News of the Future: Or Let's Start Horsing Around, by D. N. Williams, May 4 p 23
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52
Automakers Put Fat Parts List on Diet, by D. N. Williams, June 22 p 37
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52
Automakers Put Fat Parts List on Diet, by D. N. Williams, June 22 p 37
Big 3 in Battle for New Market in Subcompact Wagons, by D. N. Williams, Feb 24 p 23
The Bug and the Beetle Become U. S. Movie Stars for Productivity, by D. N. Williams, Mar 9 p 40
Buick Sparking Efforts to Meet Emission Laws, by D. N. Williams, Feb 10 p 25
Cadillac Begins GM's Standardization of Engine Plan, by D. N. Williams, May 11 p 24
Car Interiors: All the Jazz is Moving to the Inside, by D. N. Williams, June 29 p 27
Chrysler's Plant Pinned on New Axle Line, by D. N. Williams, Mar 16 p 25
Does Ford Have Some ESP on the ESV Program? by D. N. Williams, May 18 p 23
Emissions: An Exhausting Game of Politics, by D. N. Williams, Apr 13 p 23
Ford: Give Us Your Junk Cars, Your Old Foam . . ., by D. N. Williams, Apr 20 p 23
Ford Reduces Shutdown Time for Model Changeover, by D. N. Williams, Jan 6 p 23
GM's Pushing to Develop Turbine Auto? by D. N. Williams, Jan 27 p 23
Greetings, Your Chevy is About to be Recalled! by D. N. Williams, Mar 2 p 21
Imports: The British are Staying . . ., by D. N. Williams, Feb 17 p 23
Lordstown Shootout: Cost-Cutters vs. New Labor, by D. N. Williams and R. A. Wilson, Feb 3 p 38
Roadmap for Exhaust Control Should List Six-Stop Trip, by D. N. Williams, Mar 23 p 23
Sentinel Program on the Lookout for GM Defects, by D. N. Williams, Mar 9 p 23
Somewhere in All these Lemons there May be a Creampuff, by D. N. Williams, Jan 6 p 85
Steel Summary: It Has Been a Week of UPs, Feb 10 p 119
Sure, the Automakers are at Transpo, by D. N. Williams, June 1 p 40
UAW vs Japan: A Different Kind of Workstyle, Apr 27 p 17
VW on Safety: Air Bag, Nein; Gas Belt, Ya, by D. N. Williams, May 25 p 27
Volkswagen Makers Expecting 'Slow Crawl' in '72, Feb 3 p 25
Wankel Barbs are Competitor Sour Grapes, Says Mazda, by D. N. Williams, June 22 p 21
Wankel, Wankel, Little Car, How they Wonder How You Are, by D. N. Williams, Mar 30 p 23

Automotive Industry—Weekly Reports of Inside and Outside Influences (See Also D. N. Williams)

Automotive Industry

Auto Imports: Less Worrying and Buy U.S., by D. N. Williams and James Beizer, Apr 6 p 41
Auto News of the Future: Or Let's Start Horsing Around, by D. N. Williams, May 4 p 23
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52
Automakers Put Fat Parts List on Diet, by D. N. Williams, June 22 p 37
Canada Grumbles about U. S. Use of DISC Companies, by Robert Jamieson, May 11 p 25
Detroit in Driver's Seat as Trucks Boom, by D. N. Williams, May 25 p 70
Detroit: Things are Better but Not Best, by D. N. Williams, Apr 27 p 21
FTC is After Cereal Makers as Auto Warm-Up? by K. A. Kaufman, Feb 3 p 21
GM Supplies: Anything We Can't Do You Can Do Better? by D. N. Williams, June 15 p 21
NDT Methods Get Attention of Automotive Men, Jan 27 p 61
Profit Crunch Tames Union Urges, by D. N. Williams, Feb 10 p 67
Programmed Controls Spark Era in Detroit, by J. E. Sandford, Feb 10 p 81
Somewhere in All these Lemons there May be a Creampuff, by D. N. Williams, Jan 6 p 85
Sure, the Automakers are at Transpo, by D. N. Williams, June 1 p 40

Avery Machine Tool Div.:

Machine Tool Market: Going, Going . . ., by Gene Beaudet and R. A. Wilson, Mar 30 p 50

Avon Products Co.:

This is No Powder Puff Derby, by Gene Beaudet, Mar 16 p 5

Avondale Shipyards, Inc.:

New Shipbuilding Orders Carry Metalworking Cargo, by K. W. Bennett, Mar 30 p 48

B

Babcock & Wilcox Co.:

Bearings Seek Economy in New Methods, by T.C. DuMond, Apr 27 p 51
Independent Job Shop Tackles Composites, Feb 10 p 87
Is Devaluation Another Economic Myth? by J. M. Beattie, Jan 27 p 43
Managers Profit from Financial Awareness, by S. H. Hockenberry, Mar 2 p 39
Nuclear Equipment: Oh Those Shipments! by J. M. Beattie, Mar 23 p 42
Transfer Machine Builders Line Up for Foreign Stations, by K. W. Bennett, Apr 6 p 46
Wankel Contours Present Grinding Challenge, Apr 6 p 60
Wankel Engine Revs Up Tooling Orders, by D. N. Williams, Mar 16 p 54

Bain Machine Works

Swedish Drill Fills Gap in U. S. Market, by B. D. Wakefield, Feb 24 p 62

Barber-Greene Co.:

Job Market Starts to Crack Open, by K. W. Bennett, G. J. McManus, D. N. Williams and R. A. Wilson, Apr 27 p 37

Barclay Foundry Industries

Farm Area's New Crop-Factories, by K. W. Bennett, Feb 10 p 65

Barrett Electronics Corp.:

Materials Handling is in an Uplift, by K. W. Bennett, Apr 20 p 72

Bars and Shapes

Abrasives and Heat Simplify Cutting-Off of Steel Bars, June 22 p 55

Bath Cleveland Div.:

Machine Blanks Precisions Parts in Single Stroke, Feb 17 p 58

Basic Oxygen Process

Coming Soon: French LWS Process for Steelmaking, by G. J. McManus, June 29 p 80
New BOF Vessel is Convertible to Bottom Blowing, June 29 p 33

Bastian-Blessing, Inc.:

Use Middle Managers to Key on Profits, by K. W. Bennett, Apr 13 p 53

Bath Iron Works Corp.:

New Shipbuilding Orders Carry Metalworking Cargo, by K. W. Bennett, Mar 30 p 48

Battelle Development Corp.:

Steel Fibers Reinforce Concrete, May 11 p 27

Battelle Memorial Institute

Forge Ti-Alloy Weldment to Go Into Orbit, Mar 30 p 66
Steel Can Rest Comfortably After Tank-Car Diagnosis, by C. J. Suchocki, May 25 p 72
There is No "Energy Crisis", But . . ., by B. D. Wakefield, Mar 9 p 49
Will Metals' Recycling Need a Social Price Tag? by J. J. Obrzut, Jan 27 p 54

Bay State Abrasives Div.:

Abrasives and Heat Simplify Cutting-Off of Steel Bars, June 22 p 55

William Bayley Co.:

Computers' Big Payoff for Small Businesses, by A. M. Greene, Mar 30 p 63

Beams

Handling Taken Out of Beam Fabrication, by J. J. Obrzut, Feb 24 p 61

Bearings

Bearings Seek Economy in New Methods, by T. C. DuMond, Apr 27 p 51
Japaneses Bearings—All the Way from Chatsworth, Calif.? by James Beizer, June 29 p 67

Bee Chemical Co.:

Coatings Give Plastics Raft of New Traits, by J. J. Obrzut, Mar 16 p 71

Belden Corp.:

The Dawning of a New Age of Electronics? by K. W. Bennett, Feb 3 p 40

Bell Helicopter Co.:

Teflon Has a Knack for Solving Problems, by J. J. Obrzut, June 22 p 51

Bendix Corp.:

Auto Emission Control: Suppliers Heyday? by D. N. Williams, Apr 13 p 45
Programmed Controls Spark New Era in Detroit, by J. E. Sandford, Feb 10 p 81

Lawrence Berkeley Laboratory

New Treatment Increases Toughness in Alloy Steels, June 8 p 61

Berman Bros. Iron & Metal Co., Inc.:

It's a New Year for Scrap in Many Ways, Jan 27 p 71
Steel's Iron Mine Can be the City Dump, by G. J. McManus, Mar 23 p 57

Bertea Corp.:

Orderly Automation Needs Involvement of Top Management, May 4 p 83

Bethlehem Steel Corp.:

Are Wage-Price Controls a Portend? by K. A. Kaufman, Jan 27 p 21
Bethlehem Ponders Huge Blast Furnace, by G. J. McManus, Mar 30 p 65
Bethlehem-State Coke-Control Pact Bets on Tomorrow, by G. J. McManus, Mar 16 p 57
Boost Productivity of All—Including the Boss? by P. J. Cathey, May 18 p 27
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77
How to Win Friends and Influence Buyers? by G. J. McManus, Apr 20 p 73
Is Devaluation Another Economic Myth? by J. M. Beattie, Jan 27 p 43
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Steel Summary: Answering the Industry Critics, Apr 20 p 123
Steel Summary: 'Grand Tour' of Technology, by G. J. McManus, June 15 p 71
Steel Summary: No Time to Wait for a Boom, Mar 16 p 78
A Third Coated Steel is Ready to Roll, by R. R. Irving, June 1 p 52

Bickley Furnaces, Inc.:

High-Velocity Jet Keeps Furnace Fired with Uniform Heat, by A. M. Greene, June 1 p 54

Big Three Industries, Inc.:

Positioners Take the Downtime Out of Welding, by R. R. Irving, Mar 30 p 60

Bituminous Coal Operators Assn.:

Working May be Hazardous to Your Health, by D. N. Williams, Jan 20 p 22

Black & Decker Mfg. Co.:

Every Manager Can Learn to Live with Phase II, Feb 10 p 29
Profit Planning: An Exercise Open to All, June 8 p 52

Blaw-Knox Co.:
New Rolls Last Longer in Furnace Service, May 9 p 56
The Search for America, Inc., by G. J. McManus, Jan 6 p 95

E. W. Bliss Co.:
How Costly is Meeting OSHA's Rules on Presses? May 25 p 73
Multiple Linkage Press Drives Looking Up, by B. D. Wakefield, May 18 p 62
What's Behind Machine Tool Curtain? by K. A. Kaufman and R. A. Wilson, June 8 p 46
Who said this Industry is De-Pressed? by K. W. Bennett, June 22 p 40

Boat Trailers
Electric Disc Brakes Beats the Drum for Boat Trailers, by D. N. Williams, Jan 13 p 25

Bodine Corp.:
Get it Together with Automatic Assembly, by R. A. Wilson, June 29 p 82

Boeing Co.:
Federal Funds Accelerate Mass Transit, by T. C. DuMond, Mar 23 p 52

Bomco, Inc.:
Oil Squeezes Out Low-Cost Forms, by T. H. Malim, Jan 20 p 37

Bonding
Solid State Bonding Joins Similar, Dissimilar Metals, Feb 24 p 28

Booz, Allen & Hamilton, Inc.:
Unlock Dollars Frozen in Inventories, by K. W. Bennett, Apr 20 p 67

Booz-Allen Applied Research, Inc.:
Tomorrow's New Products, Today, by the Hunch Bunch, by K. W. Bennett, May 18 p 49

Boston Digital Corp.:
The New Technology in Low Cost NC, by J. E. Sandford, June 1 p 48

Boston University
Increasing Output is Job for Machines—Not People, by J. E. Sandford, Feb 10 p 71

Brass
Brass Mills Took Turn for the Worst in 1971, by James Beizer, Feb 24 p 75

Braun Engineering Co., Inc.:
Cold Forming Occupies a Hot New Turf, by R. A. Wilson, May 11 p 52
Multiple Linkage Press Drives Looking Up, by B. D. Wakefield, May 18 p 62

Brazing
Fluxless Brazing Goes High Production, by R. A. Wilson, Apr 27 p 56

Bridgeport Machines Div.:
Basic Machine Tools Builder Continues Challenging Imports, by J. E. Sandford, Mar 9 p 42
The New Technology in Low Cost NC, by J. E. Sandford, June 1 p 48

Briskin Mfg. Co.:
The Price Controls Squeeze Play? by K. A. Kaufman, K. W. Bennett and G. J. McManus, May 11 p 35

Bristol Brass Corp.:
Brass Mills Took Turn for the Worst in 1971, by James Beizer, Feb 24 p 75

British Leyland Motors, Inc.:
Auto Imports: Less Worrying and Buy U.S., by D. N. Williams and James Beizer, Apr 6 p 41
Imports: The British are Staying . . ., by D. N. Williams, Feb 17 p 23

Broaching
Pot Broach Doubles Part Production, June 29 p 81

Broken Hill Proprietary Co., Ltd.:
Australia Shakes Off Role as "Quarry for the World", by James Beizer, Apr 6 p 77

Brookings Institution
Great Expectations for U.S. Exports? by K. W. Bennett, Jan 6 p 88
Politics or Not, There's a Tax Increase Coming . . ., by K. A. Kaufman, June 1 p 23

Brown & Root Co.:
Construction: Have Your Cake and Eat It Too! May 4 p 19

Brown & Sharpe Mfg. Co.:
Wankel Engine Revs Up Tooling Orders, by D. N. Williams, Mar 16 p 55

Bruce-Mueller-Huntley, Inc.:
Unlock Dollars Frozen in Inventories, by K. W. Bennett, Apr 20 p 67

Bryant Grinder Corp.:
Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50
What's Behind Machine Tool Curtain? by K. A. Kaufman and R. A. Wilson, June 8 p 46

Budd Co.:
Is U. S. Technology Slip Really Showing? by J. M. Beattie, May 4 p 63

Buhr Machine Tool Div.:
Programmed Controls Spark New Era in Detroit, by J. E. Sandford, Feb 10 p 81

Buick Div.:
Unbalanced Parts are Centerless Ground, by D. N. Williams, June 8 p 64

Building Construction
Building Trades: 'God Bless America' and Kill the Scabs, June 29 p 23
Handling Taken Out of Beam Fabrication, by J. J. Obrzut, Feb 24 p 61

Bumpers
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52

Bunker Hill Co.:
Price Boosts on Cadmium Led by Bunker Hill, by James Beizer, Mar 16 p 123

Bunting Co.:
Powder Coating Line Scores Hit First Time, by J. J. Obrzut, May 4 p 84

Burgess Vibrocrafters, Inc.:
U.S. Manufacturers Out for Blood in Export Game? by K. W. Bennett, Mar 9 p 36

Burnham Corp.:
Dual-Fuel Burner Adapts to Fuel Shortages, Mar 16 p 78

Burns International Security Service, Inc.:
Court Pulls Plug on NLRB's Successor Powers, May 25 p 23

Burroughs Corp.:
Teflon Has a Knack for Solving Problems, by J. J. Obrzut, June 22 p 51

Business/Finance Newsfront, Weekly Editorials and Forecast (See Also Gene Beaudet)

C

C-E Cast Div.:
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87

Cabot Corp.:
ESR Outperforms VAR in Making Superalloys, by T. C. DuMond, May 11 p 49

Cadillac Div.:
Aluminum Hoods Catch GM's Eye for '74 Cadillac? by D. N. Williams, June 8 p 47

Cadmium
Aluminum, Copper, Cadmium-Talk About Prices, Dumping, by James Beizer, May 25 p 71
Price Boosts on Cadmium Led by Bunker Hill, by James Beizer, Mar 16 p 123

Calgon Corp.:
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77

Calweld Div.:
A Light Appears at the End of Tunneling Market, by K. W. Bennett, June 29 p 66

Canada
Canada Grumbles About U.S. Use of DISC Companies, by Robert Jamieson, May 11 p 25
Sure He Heard You, but Still put it in Writing, Mar 23 p 27

Cans
Canmaking's New Battleground: The D & I Process, by G. J. McManus, June 29 p 68

Carbides
See also: Abrasives
Calcium Carbide Injected by Lance into Molten Pigs, May 4 p 82
Carbide Saw Gives U.S. an Import Blocker, by B.D. Wakefield, Apr 13 p 65
Fine Grain Super Tool Steels Make Fine Grinding Easier, Aug 20 p 90
New Cutting Tool Material Moves into Production Stage, by R. A. Wilson, May 11 p 54
New Tools from New Materials, by J. E. Sanford, Apr 13 p 59
Redesign in Carbide Guides Doubles Life of Honing Stones, by W. G. Patton, Jan 20 p 36

Carborundum Co.:
Ceramics Begin to Answer Industry's Burning Questions, by A. M. Greene, June 22 p 48
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87

Carpenter Technology Corp.:
Industry Opens its Purse, by G. J. McManus, Mar 23 p 39

Carter Associates, Inc.:
OSHA: Guess Who Moved into the Executive Suite? Mar 30 p 27

Cartridge Television, Inc.:
It's Prime Time for Consumer Electronics, by K. W. Bennett, June 22 p 35

Casting, Continuous
European Companies Joining Hands on Large Jobs, by G. J. McManus, May 25 p 29
Will Metals' Recycling Need a Social Price Tag? by J. J. Obrzut, Jan 27 p 54

Castings
Does Your Company Keep its Know-How Secret? Wise Up, Jan 20 p 14
Ford Flat Rock Ready to Roll, by R. A. Wilson, Jan 27 p 58

Castings, Die
Cylinder Heads Die Cast at 40 per Hour, by Raymond Shah, May 18 p 58

Caterpillar Tractor Co.:
Get it Together with Automatic Assembly, by R. A. Wilson, June 29 p 82
Great Expectations for U.S. Exports? by K. W. Bennett, Jan 6 p 88
Materials Handling is in an Uplift, by K. W. Bennett, Apr 20 p 72
The Search for America, Inc., by G. J. McManus, Jan 6 p 95

Ceramics
Ceramics Begin to Answer Industry's Burning Questions, by A. M. Greene, June 22 p 48
High-Velocity Jet Keeps Furnace Fired with Uniform Heat, by A. M. Greene, June 1 p 55

Chains
Another Safety Problem Rears its Head, by B. D. Wakefield, Apr 6 p 59

Chamberlain Mfg. Corp.:
Carbide Saw Gives U.S. an Import Blocker, by B. D. Wakefield, Apr 13 p 65

Chambersburg Engineering Co.:
Forgers and OSHA: Bad Housekeeping Seal of Approval? by R. A. Wilson, Apr 6 p 47

Chase Brass & Copper Co.:
Too Much Month Left at the End of the Money, by R. A. Wilson, Feb 17 p 40

Chemfix Corp.:
Solid Waste: From Dirty Sludge to Clean Dirt, Feb 10 p 27

Cherry Rivet Div.:
Inertia Welds Take on Bimetallic Fasteners, by W. B. Causey, Apr 6 p 63

Chevrolet Division:
Not All Reasons for Use of Aluminum are Light Weight, by James Beizer, Jan 13 p 65

Chicago Bridge & Iron Co.:
Nuclear Equipment: Oh Those Shipments! by J. M. Beattie, Mar 23 p 42

Chicago Tooling Assn.:
Tool and Die: Starting on the Road Back, by R. A. Wilson, Jan 27 p 50

Chile
Kennecott's Top Men on Supply, Price, Pollution, by James Beizer, Jan 20 p 29
New Expropriation Rules are Pay or Get Cut Off, by K. A. Kaufman, Jan 27 p 21

China
IUE Queries Nixon on U.S.-Formosa Issues, Mar 16 p 27
Nixon Won't Bring Back More Trade with China, by K. A. Kaufman, Feb 24 p 21

Christian Brothers College
Teachers Working and Learning-in Industry? Jan 27 p 27

Chrome Ore
Annual Meetings are Not Always Sleepy Affairs . . ., by J. M. Beattie, May 4 p 69
Rhodesian Chrome: Don't Import, Import, Don't . . ., by K. A. Kaufman, June 1 p 23

Chrysler Corp.:
Automakers Put Fat Parts List on Diet, by D. N. Williams, June 22 p 37
Big 3 in Battle for New Market in Subcompact Wagons, by D. N. Williams, Feb 24 p 23
Boost Productivity of All—Including the Boss? by P. J. Cathey, May 18 p 27
Chrysler's Controls: Or Now it's Phase I for Fasteners, by D. N. Williams, Apr 6 p 23
Chrysler's Plant Pinned on New Axle Line, by D. N. Williams, Mar 16 p 25
Detroit: Things are Better but Not Best, by D. N. Williams, Apr 27 p 21
How to Catch a Thief—by Chrysler! by D. N. Williams, Feb 3 p 23
Programmed Controls Spark New Era in Detroit, by J. E. Sandford, Feb 10 p 81
Sure, the Automakers are at Transpo, by D. N. Williams, June 1 p 40

Cincinnati Inc.:
Press Stops When Arm Breaks Light Beam, Feb 10 p 85

Cincinnati Milacron
A/C: Rare Bird that's Drawing a Crowd, by K. W. Bennett, May 4 p 65
Machine Builders: Again, Hopeful Hearts, by R. A. Wilson, Mar 2 p 38
Machine Tools: Caveat Gets Emptied, by R. A. Wilson, May 11 p 40
The New Technology in Low Cost NC, by J. E. Sandford, June 1 p 48
Tool Builders Tap Pent-Up Demand, by R. A. Wilson, Feb 3 p 44
Tooling Materials Push Lathe Limits, by R. A. Wilson, Mar 9 p 38
Value Engineering Brings CNC into Focus, by R. A. Wilson, May 25 p 81

Clark Equipment Co.:
Is Licensing in Danger from Exports? by K. W. Bennett, Mar 16 p 60

Cleveland Cliffs Iron Co.:
Ore Men Iron Out Their Problems, by R. A. Wilson, Apr 13 p 46

Cleveland Turning Machine Div.:
The New Technology in Low Cost NC, by J. E. Sandford, June 1 p 48

Climax Molybdenum Co.:
Copper Gains a Little More Breathing Room, by James Beizer, June 1 p 27

Coal
Britain Beset by Coal Strike, Labor Woes, Feb 17 p 25
Britain's Coal Miners' Strike Hurt Production Output, Mar 2 p 22
Coal's Future: Dig We Must, but Dig We Can't, by R. A. Wilson, May 18 p 45
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77
Thinking Energy is "No Fault" at GM, by D. N. Williams, Jan 27 p 23

Coaltek Associates
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77

Coatings
A1 Transit Cars Given Textured Look by Scratch Brush, May 25 p 88
Coatings Give Plastics Raft of New Ideas, by J. J. Obrzut, Mar 16 p 71
Coatings Protect Costly Alloys During Treatment, Jan 27 p 29
Coil Coaters Back on Growth Curve, but See No Technical Breakthroughs for Year, by B. D. Wakefield and K. W. Bennett, Feb 3 p 56
Coil Coaters Paint a Rosy Picture, May 18 p 44
Ford Has Coating it Thinks Will Lick Corrosion, May 11 p 56
New Coating Helps Carbon Steel Outperform Stainless, June 15 p 25
New Tools from New Materials, by J. E. Sandford, Apr 13 p 59
Paint Line in Harmony with Environment, by B. D. Wakefield, Mar 23 p 56
Phosphate Coating Solves Problems in Bolt Tightening, June 22 p 27
Powder Coating Line Scores Hit First Time, by J. J. Obrzut, May 4 p 84
Teflon Has a Knack for Solving Problems, by J. J. Obrzut, June 22 p 51
A Third Coated Steel is Ready to Roll, by R. R. Irving, June 1 p 52

Coils
Coil Coaters Back on Growth Curve, but See No Technical Breakthroughs for Year, by B. D. Wakefield and K. W. Bennett, Feb 3 p 56
Coil Coaters Paint a Rosy Picture, May 18 p 44
Hot Coil Handling Cut by One-Third, Mar 9 p 55
Paint Line in Harmony with Environment, by B. D. Wakefield, Mar 23 p 56

Coke
Bethlehem-State Coke-Control Pact Bets on Tomorrow, by G. J. McManus, Mar 16 p 57
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77

Cold Forming
Cold Former from Germany Makes U.S. Debut, by R. A. Wilson, June 22 p 54
Cold Forming Occupies a Hot New Turf, by R. A. Wilson, May 11 p 52

Colt Industries, Inc.:
Fine Grain Super Tool Steels Make Fine Grinding Easier, Aug 20 p 90

Combustion
Dual-Fuel Burner Adapts to Fuel Shortages, Mar 16 p 78

Combustion Engineering, Inc.:
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87
Make Your Heat Treating Furnace Hotter, by B. D. Wakefield, Apr 27 p 58

Commission of the Economic Community
Is Devaluation Another Economic Myth? by J. M. Beattie, Jan 27 p 43

Composite Materials
The B-1: A New Approach to Building Planes, by W. G. Patton, June 15 p 59
Carbon Composites Strengthened by Vapor Deposition, Feb 10 p 31
F-14 Puts Advanced Technology to the Test, by R. R. Irving, June 15 p 55
Independent Job Shop Tackles Composites, Feb 10 p 87
Orbiter Material Takes 100 Cycles at 2500°F, Feb 17 p 27
President Says 'Blast Off' for Space Shuttle, by A. M. Greene, Jan 13 p 45

Computer Complex, Inc.:
Time Sharing Spreads a Wider Net, by J. E. Sandford, June 8 p 62

Computers
Car Computers: 'I'll Drink to That!' by D. N. Williams, June 8 p 27
Computer Moves Data, Not Paper, Feb 3 p 54
Computer Sets Charge Makeup for Steel, May 11 p 55
Computers' Big Payoff for Small Businesses, by A. M. Greene, Mar 30 p 63
Data Banks Serve Industry's Need to Know, by A. M. Greene, Apr 6 p 57
Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50
Fast Data Entry-Fast Mill Feedback, Feb 17 p 57
Finished Dimensions Govern Tube Bending, May 18 p 55
Ford Flat Rock Ready to Roll, by R. A. Wilson, Jan 27 p 58
GM Plants Seeds to Develop CAM Machinery, by J. E. Sandford, Feb 24 p 53
Increasing Output is Job for Machines—Not People, by J. E. Sandford, Feb 10 p 71
Maxis to Minis, Computers are Calculating Gains, by K. W. Bennett, May 11 p 39
Programmed Controls Spark New Era in Detroit, by J. E. Sandford, Feb 10 p 81
SME Conference Stresses Computers, Apr 13 p 69
Time Sharing Spreads a Wider Net, by J. E. Sandford, June 8 p 62
Value Engineering Brings CNC into Focus, by R. A. Wilson, May 25 p 81
Will There Always Be a Europe for U.S. Computers? June 8 p 29

Concrete
Steel Fibers Reinforce Concrete, May 11 p 27

Conference Board
Financing: Strong, Clear Fronts, with Few Small Clouds, by P. J. Cathey, Mar 2 p 37
How Much Capacity is Really Useable? by R. A. Wilson, June 15 p 48
It'll be Great in 1990 if . . ., by P. J. Cathey, Feb 17 p 44
When it Rains Information, Managers Stay Dry, Feb 24 p 27

Conrac Corp.:
Finished Dimensions Govern Tube Bending, May 18 p 55

Consarc Co.:
From Russia with Love—If You Have a License? by J. M. Beattie, June 22 p 38

Conservall, Inc.:
Pollution Control: Rinse Out a Profit, by R. A. Wilson, Feb 17 p 48

Consolidated Aluminum Co.:
Aluminum, Stainless Prices: Going Down the Up Stairs, by James Beizer, May 11 p 41

Consolidated Copper Co.:
Nonferrous '71: Crying All the Way to the Bank, by James Beizer, Feb 17 p 45

Consoer & Townsend
Walter, Water Everywhere—Even Some to Drink, by K. W. Bennett, June 15 p 43

Construction Industry
Abel Canes PB: Like Flogging a Dead Horse? Mar 9 p 19
Building Trades: 'God Bless America' and Kill the Scabs, June 29 p 23
Construction: Have Your Cake and Eat it Too! May 4 p 19
Steel Summary: No Building Boom this Summer, June 22 p 63

Consumerism
Consumer Union Fires Torpedo at Imports, by K. A. Kaufman, June 1 p 42
'Product Quality' is Buyer's Concern, Says OMB Official, by K. A. Kaufman, Apr 6 p 21
Who Says the Consumer Never Wins? June 15 p 45

Consumers Union
Consumer Union Fires Torpedo at Imports, by K. A. Kaufman, June 1 p 42
Steel Summary: Industry Loses the Blues, June 1 p 65
Where There's Smoke . . ., by G. J. McManus, June 1 p 42

Continental Can Corp.:
Canmaking's New Battleground: The D & I Process, by G. J. McManus, June 29 p 68

Continental Die Casting Div.:
Profit Crunch Tames Union Urges, by D. N. Williams, Feb 10 p 67

Continental Illinois Bank
Great Expectations for U.S. Exports? by K. W. Bennett, Jan 6 p 88

Continental Oil Co.:
Will Mining Come Out of the Dark with a Truth Squad? by James Beizer, Jan 27 p 69

Control Data Corp.:
Farm Area's New Crop-Factories, by K. W. Bennett, Feb 10 p 65

Control Systems Research, Inc.:
Spend Now or Miss the Boat? by G. J. McManus, Apr 6 p 44

Convair Div.:
An 'Impossible' Part Meets NC Tape, Jan 20 p 37

Adolph Coors Co.:
Canmaking's New Battleground: The D & I Process, by G. J. McManus, June 29 p 68

Copper
Aluminum, Copper, Cadmium-Talk About Prices, Dumping, by James Beizer, May 25 p 71
Anaconda's Future Profits Out of Place? by James Beizer, Mar 30 p 55
Asarco Feels the Teeth of Price Controls, by James Beizer, Apr 20 p 125
Copper Alloy Formed Without Solution Anneal, Mar 23 p 29
Copper Comes a Cropper in Arizona Smelter Case, by James Beizer, Jan 27 p 48
Copper Gains a Little More Breathing Room, by James Beizer, June 1 p 27
Copper Market is Thinning Down in Strength, by James Beizer, Mar 30 p 85
Copper Supply Outlook Gives Producers the Shakes, by James Beizer, May 18 p 83
Copper Supply: When is Enough Not Enough? by James Beizer, Apr 20 p 125

Copper Waits, and Waits, and Waits for a Better Economy, by James Beizer, Feb 3 p 71
Everybody Has to Lose Arizona Copper Case, by James Beizer, Jan 13 p 37
The Grand Old Party and the 'Copper Barons', by James Beizer, Feb 17 p 69
The Helter-Skelter Smelter Case Keeps on Rollin' Along, by James Beizer, June 15 p 73
It's Price Change Time—and Phelps Does It Again, by James Beizer, Mar 2 p 65
Kennecott's Top Men on Supply, Price, Pollution, by James Beizer, Jan 20 p 29
London's Copper Price Pendulum Gives U.S. Producers the Jitters, by James Beizer, June 8 p 79
Phelps Dodge Slates New Western Smelter, by James Beizer, Mar 16 p 56
Pollution Hearings: Politics—2, Copper—1, by James Beizer, Mar 2 p 34
Probe Senses Oxygen in Molten Copper, Mar 30 p 66
The Problems with Having a Smelter as a Neighbor, by James Beizer, Jan 20 p 47
Taking the Spaghetti-Making Out of Copper, by J. M. Beaver, June 1 p 67
What are the Price Prospects for Copper, Lead, Zinc? by James Beizer, June 29 p 109

Copper Development Assn.:
Copper Supply Outlook Gives Producers the Shakes, by James Beizer, May 18 p 83

Copperweld Steel Co.:
Steel Quotas: Are Agreements in the Mail? by G. J. McManus, Apr 13 p 43
U. S. Executive Finds Japan's Managers 'Stunned', Apr 27 p 23
Want an Edge in Exporting: Try a DISC, by G. J. McManus, Apr 6 p 51

Cornell University
Is it a Metal? Is it a Gas? Yes—it's Supersomething, by K. W. Bennett, Jan 13 p 43
Ocean Listed as Potential Source of Energy Fuel, Jan 6 p 28

Corning Glass Works:
Ceramics Begin to Answer Industry's Burning Questions, by A. M. Greene, June 22 p 48
Financing: Strong, Clear Fronts, with Few Storm Clouds, by P. J. Cathey, Mar 2 p 37

Cornwall Corp.:
Giants Go, but Small Wares Prosper, by K. W. Bennett, Mar 23 p 44

Corrosion
Ford Has Coating it Thinks Will Lick Corrosion, May 11 p 56
Portable Unit Takes Electropolishing to Workpiece, Mar 30 p 29
Sail Speed Meter Poses Interesting Materials Problems, Jan 13 p 29

Cost of Living Council
Asarco Feels the Teeth of Price Controls, by James Beizer, Apr 20 p 125
The Price Controls Squeeze Play? by K. A. Kaufman, K. W. Bennett and G. J. McManus, May 11 p 35

Council of Economic Advisors
Wage-Price Controls Assured Long Run by Administration, by K. A. Kaufman, Feb 3 p 41

Crawford Door Co.:
Coil Coaters Paint a Rosy Picture, May 18 p 44

Creusot Loire (France)
Coming Soon: French LWS Process for Steelmaking, by G. J. McManus, June 29 p 80

Cross Co.:
NEP, Devaluation Speed Pinto Engine Naturalization, by D. N. Williams, Jan 20 p 27
Programmed Controls Spark New Era in Detroit, by J. E. Sandford, Feb 10 p 81
Special Machine Orders Boom in Early '72, by K. W. Bennett, Mar 30 p 49
Transfer Machine Builders Line Up for Foreign Stations, by K. W. Bennett, Apr 6 p 46

Crucible Specialty Metals Div.:
Fine Grain Super Tool Steels Make Fine Grinding Easier, Aug 20 p 90
New Tools from New Materials, by J. E. Sandford, Apr 13 p 59

Crucible Steel Co.:
Quota: Not the 'Whole' Thing, But . . ., by K. A. Kaufman, May 11 p 38

Cryogenics
Cryogenics Is Not a Fragment of Scrap's Imagination, by K. W. Bennett, May 18 p 47

Curtiss Wright Corp.:
Shot Peening Extends Fatigue Life of Tractor Parts, by B. D. Wakefield, May 18 p 57

Cutler-Hammer, Inc.:
Spend Now or Miss the Boat? by G. J. McManus, Apr 6 p 44
Transfer Machine Builders Line Up for Foreign Stations, by K. W. Bennett, Apr 6 p 46

Cutting Tools
Abrasives and Heat Simplify Cutting-Off of Steel Bars, June 22 p 55
Can't Cut Hard Material? "Blast" it Away, Apr 13 p 63
Carbide Saw Gives U.S. an Import Blocker, by B. D. Wakefield, Apr 13 p 65
Carbide Slitting: When it Works and Why, Feb 17 p 59
Laser Blasts 7200 Holes Each Minute, Feb 24 p 67
Navy Buys First U. S. Built NC Nibbler, by B. D. Wakefield, Apr 20 p 94
New Cutting Tool Material Moves into Production Stage, by R. A. Wilson, May 11 p 54
New Tools from New Materials, by J. E. Sandford, Apr 13 p 59

Cyclops Corp.:
Steel Summary: Cyclops Struggles with Detroit, Apr 27 p 69

D

Dana Corp:
Profit Crunch Tames Union Urges, by D. N. Williams, Feb 10 p 67

Danly Machine Corp.:
Who Said this Industry is Depressed? by K. W. Bennett, June 22 p 40

Dart Industries, Inc.:
Giants Go, but Small Wares Prosper, by K. W. Bennett, Mar 23 p 44

Deere & Co.:
Mowers Cash in on 'Greening' in America, by K. W. Bennett, June 8 p 48

Defense
Defense Budget Needed Rx for Wheezing Aerospace, by G. J. McManus, Feb 3 p 43
Defense Spending Plans a Counterattack, Feb 3 p 17
Washington '72: Color it Political, by K. A. Kaufman, Jan 6 p 90

Delco Moraine Div.:
Bearings Seek Economy in New Methods, by T. C. DuMond, Apr 27 p 51

Demag Aktiengesellschaft
European Companies Joining Hands on Large Jobs, by G. J. McManus, May 25 p 29
Finding the Missing Link in Steel Technology, May 25 p 29

W. S. DeMoss & Sons, Inc.:
Tool and Die: Starting on the Road Back, by R. A. Wilson, Jan 27 p 50

Design Digest—Weekly Report of New Materials, Components and Engineering Ideas

Design Engineering
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52
Design Show Will Concentrate on Promising New Technologies, Apr 27 p 64
Tomorrow's New Products, Today, by the Hunch Bunch, by K. W. Bennett, May 18 p 49

Desulfurization
Better Breathing in Parma, Ohio! May 18 p 45
Calcium Carbide Injected by Lance into Molten Pig, May 4 p 82

DeVlieg Machine Co.:
Election Year '72 Forming as Profit Year for Tool Builders, by R. A. Wilson, Jan 6 p 86
Machine Tool Market: Going, Going . . ., by Gene Beaudet and R. A. Wilson, Mar 30 p 50
Machine Tools: Caveat Gets Empted, by R. A. Wilson, May 11 p 40
Value Engineering Brings CNC into Focus, by R. A. Wilson, May 25 p 81

Diamonds
New Tools from New Materials, by J. E. Sandford, Apr 13 p 59

Digital Equipment Corp.:
Computers' Big Payoff for Small Businesses, by A. M. Greene, Mar 30 p 63
Maxis to Minis, Computers are Calculating Gains, by K. W. Bennett, May 11 p 39
Programmed Controls Spark New Era in Detroit, by J. E. Sandford, Feb 10 p 81
Value Engineering Brings CNC into Focus, by R. A. Wilson, May 25 p 81

Direct Reduction
Direct Reduction is Not Dead, by G. J. McManus, Feb 10 p 70

Disc Brakes
Electric Disc Brakes Beats the Drum for Boat Trailers, by D. N. Williams, Jan 13 p 25

Disston Div.:
Unraveling the Porter-Disston-Nicholson Caper, by G. J. McManus, Apr 13 p 47

Dofasco, Ltd.:
Water Filters: High-Rate Clean-up; Low-Cost Tab, by C. J. Suchocki, June 29 p 29

Domestic International Sales Corp.:
Want an Edge in Exporting? Try a DISC, by G. J. McManus, Apr 6 p 51

Dominion Steel and Coal Co.:
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77

Donner-Hanna Coke Co.:
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77

Dow Chemical Co.:
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52
Plastics Add Twist to Recycling Equipment, by K. W. Bennett, June 15 p 47
There is No "Energy Crisis". But . . ., by B. D. Wakefield, Mar 9 p 49

Dow Corning Corp.:
What's Behind the Successful Drive for Silicone Parts? by W. G. Patton, May 23 p 84

Drawability
I-F Steel Brings New Promise to Drawability, Jan 20 p 32

Dreis & Krump Mfg. Co.:
Press Brake Forming Can be Fast and Safe, by B. D. Wakefield, May 18 p 60

Dresser Industries, Inc.:
A Light Appears at the End of Tunneling Market, by K. W. Bennett, June 29 p 66

Drever Co.:
Spend Now or Miss the Boat? by G. J. McManus, Apr 6 p 44

Drilling
Laser Blasts 7200 Holes Each Minute, Feb 24 p 67
Swedish Drill Fills Gap in U. S. Market, by B. D. Wakefield, Feb 24 p 62

Drott Mfg. Co.:
Old Crane Steps Aside for Straddle Carrier, by B. D. Wakefield, Mar 30 p 67

Ductile Iron
New Nodulizer Curbs Smoke, Fumes for Ductile Iron, Mar 2 p 50

Dun & Bradstreet, Inc.:
Plant Costs aren't Far Out in Far East, by J. D. Baxter, May 25 p 76

E. I. duPont de Nemours & Co.:
Coatings Give Plastics Raft of New Traits, by J. J. Obrzut, Mar 16 p 71
New Fiber Has Aircraft Industry Astir, by J. J. Obrzut, June 8 p 66
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Teflon Has a Knack for Solving Problems, by J. J. Obrzut, June 22 p 51
Working May be Hazardous to Your Health, by D. N. Williams, Jan 20 p 22

Duval Corp.:
Everybody Has to Lose Arizona Copper Case, by James Beizer, Jan 13 p 37

Dr. Dvorkovitz & Associates
Data Banks Serve Industry's Need to Know, by A. M. Greene, Apr 6 p 57

Martin C. Dwyer Associates
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87

Dynamic Corp. of America
Giants Go, but Small Wares Prosper, by K. W. Bennett, Mar 23 p 44

E

Eagle-Signal Div.:
Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50

Earthmoving Machinery
A Light Appears at the End of Tunneling Market, by K. W. Bennett, June 29 p 66

Earth Resources
ERTS: Resource Hunter from Outer Space, by C. J. Suchocki, June 29 p 29
The Exhausting Problems of Resources, by K. A. Kaufman and James Beizer, Apr 20 p 70
When Energy Crunch Crunches, by J. M. Beattie and P. J. Cathey, Apr 27 p 40

Eaton Corp.:
Great Expectations for U.S. Exports? by K. W. Bennett, Jan 6 p 88
The Search for America, Inc., by G. J. McManus, Jan 6 p 95

Ecology
See: Pollution, Air
Pollution, Water
Conservation
Waste Management

Econodyne, Ltd.
Water Filters: High-Rate Clean-up; Low-Cost Tab, by C. J. Suchocki, June 29 p 29

Economics
About "The Search for America, Inc.", by Gene Beaudet, Jan 6 p 5
Are Wage-Price Controls a Portend? by K. A. Kaufman, Jan 27 p 21
The Best is Yet to Come, by Gene Beaudet, June 22 p 43
Budget Red Ink Still Putting a Stain on Eeconomy? by K. A. Kaufman, Feb 10 p 23
Burns Assures Economy of Fed Feed, by K. A. Kaufman, Feb 17 p 46
Curb People's Expectations? Boost Them! by Gene Beaudet, Jan 20 p 5
Does the GNP Show Happiness? by Gene Beaudet, Feb 10 p 5
Economists See Few 'Ifs, Ands and Buts', Jan 6 p 84
A Full Employment What? by Gene Beaudet, Feb 3 p 5
Good for You, Herman! by Gene Beaudet, Feb 17 p 5
Have We Really Turned the Corner? by Gene Beaudet, Apr 27 p 5
Is Devaluation Another Economic Myth? by J. M. Beattie, Jan 27 p 43
Is Our Attention Span Narrowing? by Gene Beaudet, Jan 27 p 5
It'll be Great in 1990 if . . ., by P. J. Cathey, Feb 17 p 44
Needed: All-Out Strategy for U. S. Growth, by K. A. Kaufman, May 4 p 73
1972: "This May Sound Crazy. But . . .", by Gene Beaudet, Jan 6 p 83
Nixon Economists Desire More 'Stimulation' in '72, by K. A. Kaufman, Jan 13 p 23
Outlook: Everything Coming Up Roses? by K. A. Kaufman, May 4 p 67
Recovery: Optimism from Federal Seers, by K. A. Kaufman, Mar 9 p 21
Recovery '71: Metalworking Ratios Say No, by J. D. Baxter, June 15 p 46
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
U. S. Manufacturing 10, 9, 8, 7, 6, 5, 4, 3, 2 . . . ? by G. J. McManus, May 25 p 69
U.S. Plays White Chips in Blue-Chip Game? by J. D. Baxter, Mar 9 p 35
Wage-Price Controls Assured Long Run by Administration, by K. A. Kaufman, Feb 3 p 41
A World Recession in 1972? No, Not Really, Jan 6 p 25

Edgcomb Steel of New England
January Thaw Hits Metalworking Orders, by K. W. Bennett, Jan 27 p 46

Edison Electric Institute
When Energy Crunch Crunches, by J. M. Beattie and P. J. Cathey, Apr 27 p 40

Education
Gm Plants Seeds to Develop CAM Machinery, by J. E. Sandford, Feb 24 p 53
Teachers Working and Learning-in Industry? Jan 27 p 27

Eisenwerk-Gesellschaft Maxmillianshütte, m.b.h.
Coming Soon: French LWS Process for Steelmaking, by G. J. McManus, June 29 p 80
New Oxygen Process Blowing Across the Ocean to U. S.? Mar 30 p 25

Elections (Presidential)
No Wonder They Flipped the Dial, by Gene Beaudet, June 15 p 5

Electric Automobiles
Coming: Electric Auto Courtesy the AEC? by J. M. Beattie and P. J. Cathey, Apr 27 p 41

Electric Motors
The State of Flux in Static Drives, by R. A. Wilson, Mar 2 p 43

Electric Power Production
Exotic Sources of Electricity Still in the Future, Mar 2 p 23
Is it a Metal? Is it a Gas? Yes—it's Supersomething, by K. W. Bennett, Jan 13 p 43
There is No "Energy Crisis", But . . ., by B. D. Wakefield, Mar 9 p 49
When Energy Crunch Crunches, by J. M. Beattie and P. J. Cathey, Apr 27 p 40

Electromagnetic Effects
Solid State Joints Formed Under Electromagnetic Pressure, by J. J. Obrzut, Apr 20 p 92

Electron Beams
EB Welding Builds Melting Electrodes, Jan 20 p 39
F-14 Puts Advanced Technology to the Test, by R. R. Irving, June 15 p 55
Glow Discharge Electron Beams Weld, Melt and Coat, June 1 p 29

Electronic Data Processing
Computer Moves Data, Not Paper, Feb 3 p 54
Computer Sets Charge Makeup for Steel, May 11 p 55
Computers' Big Payoff for Small Businesses, by A. M. Greene, Mar 30 p 63
Fast Data Entry—Fast Mill Feedback, Feb 17 p 57
Orderly Automation Needs Involvement of Top Management, May 4 p 83

Electronic Devices & Controls
Car Computers: 'I'll Drink to That!' by D. N. Williams, June 8 p 27
Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50

Electronics
The Dawning of a New Age of Electronics? by K. W. Bennett, Feb 3 p 40
It's Prime Time for Consumer Electronics, by K. W. Bennett, June 22 p 35

Electroslag
ESR Outperforms VAR in Making Superalloys, by T. C. DuMond, May 11 p 49
From Russia with Love—If You Have a License? by J. M. Beattie, June 22 p 38

Elmar Mfg. Co., Inc.:
Chicago Mill Ends Leaker Problem in Pouring Big Ingots, by B. D. Wakefield, Jan 27 p 61

Employment
Dialogue, Rapport or Task Forces to Deal with Youth? Jan 13 p 28
A Full Employment What? by Gene Beaudet, Feb 3 p 5
Job Erosion: Win Some; Lose Some, Apr 13 p 19
Job Market Starts to Crack Open, by K. W. Bennett, G. J. McManus, D. N. Williams and R. A. Wilson, Apr 27 p 37
Jobless Rate: There's a Bright Side, Too, Jan 27 p 19
Labor '72: Planning Bumps Demanding, by C. J. Suchocki, Jan 13 p 40
NAB II: A New Look in Hard-Core Training, June 8 p 23
Now, Before You Choose Up Sides . . ., by Gene Beaudet, Mar 9 p 5
Unemployment: Inflation at Any Rate, Feb 24 p 19

Engineering
See also: Value Engineering

Engines, Automobile
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52
Cadillac Begins GM's Standardization of Engine Plan, by D. N. Williams, May 11 p 24
Detroit Engine Sales Start to Purr in British Market, June 8 p 29
GM Pushes Back Wankel Production, by D. N. Williams, Feb 24 p 50
GM Wankel Tooling Grinds to a Start, by D. N. Williams, June 1 p 36
GM's Pushing to Develop Turbine Auto? by D. N. Williams, Jan 27 p 23
Gas Engine's Life Far from Over, Says Estes, by D. N. Williams, Mar 23 p 23
Grinder Smooths Wankel Production, by D. N. Williams, June 22 p 53
Mowers Cash in on 'Greening' in America, by K. W. Bennett, June 8 p 48
NEP, Devaluation Speed Pinto Engine Naturalization, by D. N. Williams, Jan 20 p 27
Powder Keg Explodes and Ford Sets Up 'War Room', by D. N. Williams, June 15 p 21
Wankel Barbs are Competitor Sour Grapes, Says Mazda, by D. N. Williams, June 22 p 21
Wankel Contours Present Grinding Challenge, Apr 6 p 60
Wankel Engine Revs Up Tooling Orders, by D. N. Williams, Mar 16 p 55
Wankel, Wankel, Little Car, How Thev Wonder How You Are, by D. N. Williams, Mar 30 p 23

Entron Controls, Inc.:
Drop-Out Manager Turns on Controls, by K. W. Bennett, Apr 13 p 49

Environment—Articles and Features on Pollution and environmental factors related to the Metalworking and Steel Industries

Environment
See: Pollution, Air Pollution, Water Conservation, Environmental Protection Agency, National Aeronautics & Space Administration, Waste Management

Environmental Protection Agency
Bethlehem-State Coke-Control Pact Bets on Tomorrow, by G. J. McManus, Mar 16 p 57
City Pollution Backlashes on Capito(a)l, by K. W. Bennett, June 1 p 38
Copper Comes a Cropper in Arizona Smelter Case, by James Beizer, Jan 27 p 48
Copper Gains a Little More Breathing Room, by James Beizer, June 1 p 27
EPA Powers-Up for War on Noise, Mar 9 p 25
EPA: Shake Things Up and Worry Later, by G. J. McManus, Mar 2 p 36
EPA Throws '73 Budget 'Down the Sewer', Feb 24 p 25
Ecology Costs: The Price of Action Comes High, Jan 13 p 27
Everybody Has to Lose Arizona Copper Case, by James Beizer, Jan 13 p 37
Gas War—or How to Keep the Lead In, by C. J. Suchocki, May 18 p 25
The Grand Old Party and the 'Copper Barons', by James Beizer, Feb 17 p 69
Heat of Pollution Hits the Coke Oven, by G. J. McManus, June 29 p 77
The Helter-Skelter Smelter Case Keeps on Rollin' Along, by James Beizer, June 15 p 73
Late Rush Sets Standards' Pace for '72, Jan 13 p 27
Nixon-Industry Combo Fail to Dent New Pollution Law, by K. A. Kaufman, Mar 23 p 21
Political Smoke Clouds Pollution Issue, by K. A. Kaufman, Feb 24 p 49
Pollution Hearings: Politics—2, Copper—1, by James Beizer, Mar 2 p 34
Pollution: Trade-off Under Protest, by James Beizer, Feb 10 p 68
Powder Keg Explodes and Ford Sets Up 'War Room', by D. N. Williams, June 15 p 21
Solid Waste: From Dirty Sludge to Clean Dirt, Feb 10 p 27
Steel's Iron City Can be the City Dump, by G. J. McManus, Mar 23 p 57
Will the Real Industry Safety Cop Please Stand! by D. N. Williams, June 29 p 64

A. Epstein Cos.:
U.S. Manufacturers Out for Blood in Export Game? by K. W. Bennett, Mar 9 p 36

Equal Employment Opportunity Commission
Weak EEDC Gets Anti-Bias Power Injection, by K. A. Kaufman, Mar 2 p 20

Erie Foundry Co.:
TRW Seeks Answer to Cost Squeeze in World's Largest Mechanical Forging Press, by R. A. Wilson, Feb 17 p 56
Who Said This Industry is Depressed? by K. W. Bennett, June 22 p 40

Essex International, Inc.:
Giants Go, but Small Wares Prosper, by K. W. Bennett, Mar 23 p 44

Ethyl Corp.:
Gas War—or How to Keep the Lead In, by C. J. Suchocki, May 18 p 25

Europe
European Companies Joining Hands on Large Jobs, by G. J. McManus, May 24 p 29
Will there Always be a Europe for U. S. Computers? June 8 p 29

European Economic Community
Trade Breaks for U. S. Trigger Release of Gold Price Bill, by K. A. Kaufman, Feb 17 p 43

Ex-Cell-O-Corp.:
Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50
Election Year '72 Forming as Profit Year for Tool Builders, by R. A. Wilson, Jan 6 p 86

NDT: Process Control or Legal Defense? by B. D. Wakefield, Jan 27 p 60
NEP, Devaluation Speed Pinto Engine Naturalization, by D. N. Williams, Jan 20 p 27
Transfer Machine Builders Line Up for Foreign Stations, by K. W. Bennett, Apr 6 p 46

Executives, Men on the Move, Who's Who in Metalworking

Executives

Bad Marriage Hurts Career, Not Vice Versa, June 29 p 31
First Step in Getting a Good Man—Sound Job Description, June 22 p 25
Future Managers: Spot Them Fast, Challenge Them Often, by P. J. Cathey, June 15 p 23
Guess Who—Among Managers—Gets Blame for Recession? by P. J. Cathey, May 25 p 31
Hire Top Managers Who Know Buyer's Problems, by R. A. Wilson, June 1 p 44
Kennecott's Top Men on Supply, Price, Pollution, by James Beizer, Jan 20 p 29
Restless Fast-Track Men are Entering Too Many Races, by P. J. Cathey, Apr 27 p 25
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Will '72 be Year of the Manufacturing Manager? Jan 6 p 27

Export-Import Bank

Eximbank Urges Sales Effort Push in Japanese Markets, by K. A. Kaufman, May 4 p 21
Great Expectations for U.S. Exports? by K. W. Bennett, Jan 6 p 88
The Search for America, Inc., by G. J. McManus, Jan 6 p 95

Extrusion

Cold Former from Germany Makes U.S. Debut, by R. A. Wilson, June 22 p 54
Cold Forming Occupies a Hot New Turf, by R. A. Wilson, May 11 p 52

F

FMC Corp.:

Back-Up Tape Gives Full Penetration in One-Side Welding, June 8 p 65
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77
Population Explosion - Industrial Robot Style, by K. W. Bennett, May 25 p 67

Factories

Farm Area's New Crop—Factories, by K. W. Bennett, Feb 10 p 65

Fafnir Bearing Co.:

Bearings Seek Economy in New Methods, by T. C. DuMond, Apr 27 p 61

Falconbridge International Ltd.:

Nonferrous Earnings Plunge to Lowest Level in Years in Sluggish Economy, by James Beizer, Apr 27 p 45

Fantus Co.:

Plant Costs aren't Far Out in Far East, by J. D. Baxter, May 25 p 76

Farm Equipment

Shot Peening Extends Fatigue Life of Tractor Parts, by B. D. Wakefield, May 18 p 57

Fasteners

Chrysler's Controls: Or Now it's Phase I for Fasteners, by D. N. Williams, Apr 6 p 23
Inertia Welds Take on Bimetallic Fasteners, by W. B. Causey, Apr 6 p 63
Fastener Torque Checked Constantly on Assembly Line, Jan 20 p 15
Phosphate Coating Solves Problems in Bolt Tightening, June 22 p 27

Federal-Mogul Corp.:

Auto Emission Control: Suppliers Heyday? by D. N. Williams, Apr 13 p 45
Bearings Seek Economy in New Methods, by T. C. DuMond, Apr 27 p 51

Federal Power Commission

There is No "Energy Crisis". But . . ., by B. D. Wakefield, Mar 9 p 49

Federal Reserve Board

Burns Assures Economy of Fed Feed, by K. A. Kaufman, Feb 17 p 46
Burns Gives Floating Tax Credits Some More Resuscitation, by K. A. Kaufman, Mar 16 p 23
Is Fed Mixing Money with Politics? by K. A. Kaufman, Jan 6 p 21
Nixon Economists Desire More 'Stimulation' in '72, by K. A. Kaufman, Jan 13 p 23
Now it's the Taxpayers Who Can Stop Inflation, by K. A. Kaufman, June 22 p 19

Federal Sign & Signal Corp.

U.S. Manufacturers Out for Blood in Export Game? by K. W. Bennett, Mar 9 p 36

Federal Trade Commission

FTC is After Cereal Makers as Auto Warm-Up? by K. A. Kaufman, Feb 3 p 21
Gas Ruling Drains FTC Power Drive, by K. A. Kaufman, Apr 13 p 21

Federated Department Stores, Inc.:

Crystal Ball '73: New Money Squeeze? by K. W. Bennett, June 29 p 63

Fiat-Motors, Inc.: (USA)

Auto Imports: Less Worrying and Buy U.S., by D. N. Williams and James Beizer, Apr 6 p 41

Fiber Reinforcement

Steel Fibers Reinforce Concrete, May 11 p 27

Fibers

Ceramics Begin to Answer Industry's Burning Questions, by A. M. Greene, June 22 p 48
New Fiber Has Aircraft Industry Astir, by J. J. Obrzut, June 8 p 66

Fichtel Sacks, AG

Mowers Cash in on 'Greening' in America, by K. W. Bennett, June 8 p 48

Finance

All Things Considered, It Could Have Been Worse, by H. R. Neal, Apr 20 p 79
Anaconda's Future Profits Out of Place? by James Beizer, Mar 30 p 55
The Best is Yet to Come, by Gene Beaudet, June 22 p 43
Beware Liability Rabbit-Punch—it's Deadly, May 11 p 44
Business and the Nostalgia Bit, by Gene Beaudet, June 22 p 5
Crystal Ball '73: New Money Squeeze? by K. W. Bennett, June 29 p 63
Eximbank Urges Sales Effort Push in Japanese Markets, by K. A. Kaufman, May 4 p 21
Financing: Strong, Clear Fronts, with Few Storm Clouds, by P. J. Cathey, Mar 2 p 37
Great Expectations for U.S. Exports? by K. W. Bennett, Jan 6 p 88
How Much Capacity is Really Useable? by R. A. Wilson, June 15 p 48
If I Had a Million, by Gene Beaudet, May 25 p 5
Industries' Latest Problem—Profits, by G. J. McManus, Mar 30 p 45
Industry Opens its Purse, by G. J. McManus, Mar 23 p 39
Justifying Machinery: It's Not So Tough, by K. W. Bennett, Feb 24 p 56
Managers Profit from Financial Awareness, by S. H. Hockenberry, Mar 2 p 39
Nixon Said that ($38B) about Deficit, Now it's this ($26B), by K. A. Kaufman, May 11 p 22
Nonferrous Earnings Plunge to Lowest Level in Years in Sluggish Economy, by James Beizer, Apr 27 p 45
Pension Bill: Going Back into Retirement? by K. A. Kaufman, May 18 p 43
Recovery '71: Metalworking Ratios Say No, by J. D. Baxter, June 15 p 46
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Spend Now or Miss the Boat? by G. J. McManus, Apr 6 p 44
This is No Powder Puff Derby, by Gene Beaudet, Mar 16 p 5
Too Much Month Left at the End of the Money, by R. A. Wilson, Feb 17 p 40
Unlock Dollars Frozen in Inventories, by K. W. Bennett, Apr 20 p 67
Unraveling the Porter-Disston-Nicholson Caper, by G. J. McManus, Apr 13 p 47
When First Quarter Earnings are Like Democratic Primaries, by James Beizer, Apr 27 p 71

First National Bank of Boston

Too Much Month Left at the End of the Money, by R. A. Wilson, Feb 17 p 40

First National City Bank of New York

Industries' Latest Problem—Profits, by G. J. McManus, Mar 30 p 45
Tax Reform: From Feudal to Futile? by G. J. McManus, May 18 p 46

First Pennsylvania Banking & Trust Co.:

Black Capitalism: Does it Really Work? by Samuel Pressley, June 15 p 50
The Search for America, Inc., by G. J. McManus, Jan 6 p 95

Fluorescent Inspection

NDT: Process Control or Legal Defense? by B. D. Wakefield, Jan 27 p 60

Foam Materials

Foam Plastic Aims at Metal Targets, Mar 16 p 31
Ford: Give Us Your Junk Cars, Your Old Foam . . ., by D. N. Williams, Apr 20 p 23
Metal Foam Measures Impact of Collisions, Mar 2 p 23

Food Industry

FTC is After Cereal Makers as Auto Warm-Up? by K. A. Kaufman, Feb 3 p 21

Foote Mineral Co.:

Annual Meetings are Not Always Sleepy Affairs . . ., by J. M. Beattie, May 4 p 69

Ford Foundation

Teachers Working and Learning—in Industry? Jan 27 p 27

Ford Motor Co.:

Automakers Put Fat Parts List on Diet, by D. N. Williams, June 22 p 37
Big 3 in Battle for New Market in Subcompact Wagons, by D. N. Willliams, Feb 24 p 23
Detroit in Driver's Seat as Trucks Boom, by D. N. Williams, May 25 p 70
Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50
Does Ford Have Some ESP on the ESV Program? by D. N. Williams, May 18 p 23
Emissions: An Exhausting Game of Politics, by D. N. Wiliams, Apr 13 p 23
Fluxless Brazing Goes High Production, by R. A. Wilson, Apr 27 p 56
Ford Flat Rock Ready to Roll, by R. A. Wilson, Jan 27 p 58
Ford: Give Us Your Junk Cars, Your Old Foam . . ., by D. N. Williams, Apr 20 p 23
Ford Has Coating it Thinks Will Lick Corrosion, May 11 p 56
Ford Reduces Shutdown Time for Model Changeover, by D. N. Williams, Jan 6 p 23
GM and Ford: Mini-Trucks for Mini-Countries, by D. N. Williams, June 1 p 25
NAB II: A New Look in Hard-Core Training, June 8 p 23
NEP, Devaluation Speed Pinto Engine Naturalization, by D. N. Williams, Jan 20 p 27
New Tools from New Materials, by J. E. Sandford, Apr 13 p 59
Powder Keg Explodes and Ford Sets Up 'War Room', by D. N. Williams, June 15 p 21
Sure, the Automakers are at Transpo, by D. N. Williams, June 1 p 40
Teachers Working and Learning-in Industry? Jan 27 p 27
Tomorrow's New Products, Today, by the Hunch Bunch, by K. W. Bennett, May 18 p 49
When it Rains Information, Managers Stay Dry, Feb 24 p 27
Will the Real Industry Safety Cop Please Stand! by D. N. Williams, June 29 p 64

Forecasting

About "The Search for America, Inc.", by Gene Beaudet, Jan 6 p 5
Are Wage-Price Controls a Portend? by K. A. Kaufman, Jan 27 p 21
Auto News of the Future: Or Let's Start Horsing Around, by D. N. Williams, May 4 p 23
The Best is Yet to Come, by Gene Beaudet, June 22 p 43
Copper Supply Outlook Gives Producers the Shakes, by James Beizer, May 18 p 83
Crystal Ball '73: New Money Squeeze? by K. W. Bennett, June 29 p 63
Curb People's Expectations? Boost Them! by Gene Beaudet, Jan 20 p 5
The Dawning of a New Age of Electronics? by K. W. Bennett, Feb 3 p 40
Economists See Few 'Ifs, Ands and Buts', Jan 6 p 84
Election Year '72 Forming as Profit Year for Tool Builders, by R. A. Wilson, Jan 6 p 86
Great Expectations for U.S. Exports? by K. W. Bennett, Jan 6 p 88
It'll be Great in 1990 if . . ., by P. J. Cathey, Feb 17 p 44
Labor '72: Planning Bumps Demanding, by C. J. Suchocki, Jan 13 p 40
Labor 2040: Population Crisis or Fertility Rite? June 1 p 21
1972: "This May Sound Crazy, But . . ., by Gene Beaudet, Jan 6 p 83
Nonferrous Chiefs See Improvements in Business Outlook, by James Beizer, May 11 p 73
Outlook: Everything Coming Up Roses? by K. A. Kaufman, May 4 p 67
Recovery Optimism for Federal Seers, by K. A. Kaufman, Month ? Date ? p 21
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
The Silver Industry Takes Another Stab at Price Predicting, by James Beizer, Feb 10 p 121
Somewhere in All these Lemons there May be a Creampuff, by D. N. Williams, Jan 6 p 85
Steel Summary: Dynamic Era of Progress Dawning? Jan 6 p 163

Steel Summary: Fairly Big Year in the Offering? Jan 27 p 67
Stop the World? Not Just Yet! by Gene Beaudet, Mar 23 p 5
The Terrors and Promises of Spring, by Gene Beaudet, Apr 13 p 5
Tomorrow's New Products, Today, by the Hunch Bunch, by K. W. Bennett, May 18 p 49
Volkswagen Makers Expecting 'Slow Crawl' in '72, Feb 3 p 25
Wage-Price Controls Assured Long Run by Administration, by K. A. Kaufman, Feb 3 p 41
Washington '72: Color it Political, by K. A. Kaufman, Jan 6 p 90
Will '72 be Year of the Manufacturing Manager? Jan 6 p 27
A World Recession in 1972? No, Not Really, Jan 6 p 25

Foreign Trade

Australia Shakes Off Role as "Quarry for the World", by James Beizer, Apr 6 p 77
Auto Imports: Less Worrying and Buy U. S., by D. N. Williams and James Beizer, Apr 6 p 41
Basic Machine Tool Builder Continues Challenging Imports, by J. E. Sandford, Mar 9 p 42
Canada Grumbles about U. S. Use of DISC Companies, by Robert Jamieson, May 11 p 25
Consumer Union Fires Torpedo at Imports, by K. A. Kaufman, June 1 p 42
Detroit Engine Sales Start to Purr in British Market, June 8 p 29
Eximbank Urges Sales Effort Push in Japanese Markets, by K. A. Kaufman, May 4 p 21
From Russia with Love—If You Have a License? by J. M. Beattie, June 22 p 38
GM and Ford: Mini-Trucks for Mini-Countries, by D. N. Williams, June 1 p 25
Getting into New World Markets: Or Bring Back Licensing, June 22 p 23
Great Expectations for U.S. Exports? by K. W. Bennett, Jan 6 p 88
Has the Import Situation Really Gone Critical? by G. J. McManus, Feb 10 p 69
Has Market's Export Ship Finally Come In? Apr 27 p 72
Import Quota Fine Print Holds Sleeper, June 8 p 51
Iron Curtain 'Creaks Open for Tool, Die Work, by K. A. Kaufman, June 22 p 39
Is Licensing in Danger from Exports? by K. W. Bennett, Mar 16 p 60
Japan's Trade Plan: Investments Up, Exports Down? Mar 2 p 22
Multinationals: Labor Finds No Help at Commerce, Feb 10 p 21
New Expropriation Rules are Pay or Get Cut Off, by K. A. Kaufman, Jan 27 p 21
Nixon Won't Bring Back More Trade with China, by K. A. Kaufman, Feb 24 p 21
Now, Before You Choose Up Sides . . ., by Gene Beaudet, Mar 9 p 5
Paybacks before Payoffs, June 22 p 39
Plant Costs aren't Far Out in Far East, by J. D. Baxter, May 25 p 76
Quota: Not the 'Whole' Thing, But . . ., by K. A. Kaufman, May 11 p 38
Quotas: 'About the Best We Could Get', by G. J. McManus, Jan 20 p 28
Rhodesian Chrome: Don't Import, Import, Don't . . ., by K. A. Kaufman, June 1 p 23
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Steel to Connally: Sorry to See You Go, John? by K. A. Kaufman, May 25 p 25
Steel Quotas: Are Agreements in the Mail? by G. J. McManus, Apr 13 p 43
Steel Summary: Are Quota Pacts Finally Ready? Mar 30 p 83
Steel Summary: Imports Plunge in April, June 8 p 77
Steel Summary: No Wild Cheers for Quota Pact, May 18 p 81
Steel Summary: Record Imports Hit Where it Hurts, Feb 3 p 69
Steel Summary: Steel Imports Within Quotas, May 11 p 71
Steel Summary: Voluntary Quotas Harm Specialty Firms, Apr 13 p 99
Swedish Drill Fills Gap in U.S. Market, by B. D. Wakefield, Feb 24 p 62
Taiwan Shifting its Policies for New Trade? Mar 16 p 27
Tool and Die: Starting on the Road Back, by R. A. Wilson, Jan 27 p 50
Trade Breaks for U.S. Trigger Release of Gold Price Bill, by K. A. Kaufman, Feb 17 p 43
Transfer Machine Builders Line Up for Foreign Stations, by K. W. Bennett, Apr 6 p 46
U.S. Manufacturers Out for Blood in Export Game? by K. W. Bennett, Mar 9 p 36
U.S. Plays White Chips in Blue-Chip Game? by J. D. Baxter, Mar 9 p 35
Want an Edge in Exporting? Try a DISC, by G. J. McManus, Apr 6 p 51
What's Behind Machine Tool Curtain? by K. A. Kaufman and R. A. Wilson, June 8 p 46
Where there's Smoke . . ., by G. J. McManus, June 1 p 42
Will there Always be a Europe for U.S. Computers? June 8 p 29

Forging Industry

Forgers and OSHA: Bad Housekeeping Seal of Approval? by R. A. Wilson, Apr 6 p 47

Forging Industry Assn.:

Forgers and OSHA: Bad Housekeeping Seal of Approval? by R. A. Wilson, Apr 6 p 47

Forgings

F-14 Puts Advanced Technology to the Test, by R. R. Irving, June 15 p 55
TRW Seeks Answer to Cost Squeeze in World's Largest Mechanical Forging Press, by R. A. Wilson, Feb 17 p 56

Formosa

See Taiwan

Foseco, Inc.:

Ceramics Begin to Answer Industry's Burning Questions, by A. M. Greene, June 22 p 48

Foundry Industry

Cylinder Heads Die Cast at 40 per Hour, by Raymond Shah, May 18 p 58
Ford Flat Rock Ready to Roll, by R. A. Wilson, Jan 27 p 58
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87
New Nodulizer Curbs Smoke, Fumes for Ductile Iron, Mar 2 p 50

Fram Corp.:

A Third Coated Steel is Ready to Roll, by R. R. Irving, June 1 p 52

France

Coming Soon: French LWS Process for Steelmaking, by G. J. McManus, June 29 p 80
Cylinder Heads Die Cast at 40 per Hour, by Raymond Shah, May 18 p 58

Randolph A. Freudig

Industry's New Watchdog: The Insurance Company, by J. M. Beattie, Mar 16 p 58

Furnaces

High-Velocity Jet Keeps Furnace Fired with Uniform Heat, by A. M. Greene, June 1 p 54

Furnaces, Arc

Chromium Recovery Improved in Stainless Refining, June 8 p 59

Furnaces, Blast

Bethlehem Ponders Huge Blast Furnace, by G. J. McManus, Mar 30 p 65
Calcium Carbide Injected by Lance into Molten Pig, May 4 p 82
European Countries Joining Hands on Large Jobs, by G. J. McManus, May 25 p 29
Finding the Missing Link in Steel Technology, May 25 p 29
Furnace Feed Simplifies Loading, by G. J. McManus, Apr 27 p 55
U.S. Steel Men Intrigued by Japan's Huge Blast Furnace, by G. J. McManus, May 18 p 59

Furnaces, Electric

Bethlehem Ponders Huge Blast Furnace, by G. J. McManus, Mar 30 p 65
Chromium Recovery Improved in Stainless Refining, June 8 p 59
ESR Outperforms VAR in Making Superalloys, by T. C. DuMond, May 11 p 49
From Russia with Love—If You Have a License? by J. M. Beattie, June 22 p 38
From Sweden: Ferroalloys without Air Pollution, by R. R. Irving, June 15 p 44
Make Your Heat Treating Furnace Better, by B. D. Wakefield, Apr 27 p 58
New Rolls Last Longer in Furnace Service, Mar 9 p 56
Two Shells Up Output of Electric Arc Furnace, Jan 20 p 39

G

GTE Sylvania, Inc.:

Every Manager Can Learn to Live with Phase II, Feb 10 p 29

Gale Products Div.:

Mowers Cash in on 'Greening' in America, by K. W. Bennett, June 8 p 48

Galvanizing

A Third Coated Steel is Ready to Roll, by R. R. Irving, June 1 p 52

Garlock Inc.:

The New Technology in Low Cost NC, by J. E. Sandford, June 1 p 48

Gas Turbines

Surge, the Automakers are at Transpo, by D. N. Williams, June 1 p 40

Gast Mfg. Co.:

Pinpoint Noise Problems at a Glance, by B. D. Wakefield, Mar 16 p 74

Gates Engineering Co.:

Coal's Future: Dig We Must, but Dig We Can't, by R. A. Wilson, May 18 p 45

Gears

Chrysler's Plant Pinned on New Axle Line, by D. N. Williams, Mar 16 p 25
Nitrided Gears Set Record for Size, Case Depth, May 18 p 61
Nylon Gears Reduce In-Plant Noise, Mar 9 p 53

General American Transportation Corp.:

New Shipbuilding Orders Carry Metalworking Cargo, by K. W. Bennett, Mar 30 p 48

General Dynamics Corp.:

An 'Impossible' Part Meets NC Tape, Jan 20 p 37
Managers Arise to Defend Technology from the Wolves, by P. C. Cathey, Apr 20 p 27

General Electric Co.:

Appliance Makers Caught with Inventories Down? by K. W. Bennett, Mar 2 p 32
Are Odds in Favor of GE Winning Antitrust Suit? by K. A. Kaufman, May 25 p 25
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52
Beware Liability Rabbit-Punch—It's Deadly, May 11 p 44
Black Capitalism: Does it Really Work? by Samuel Pressley, June 15 p 50
Crystal Ball '73: New Money Squeeze? by K. W. Bennett, June 29 p 63
Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50
DNC: The Agony of Being First, Mar 30 p 45
ERTS: Resource Hunter from Outer Space, by C. J. Suchocki, June 29 p 29
Economists See Few 'Ifs, Ands and Buts'. Jan 6 p 84
Foam Plastic Aims at Metal Targets, Mar 16 p 31
Ford Flat Rock Ready to Roll, by R. A. Wilson, Jan 27 p 58
Giants Go, but Small Wares Prosper, by K. W. Bennett, Mar 23 p 44
Great Expectations for U.S. Exports? by K. W. Bennett, Jan 6 p 88
Industry Opens its Purse, by G. J. McManus, Mar 23 p 39
Inertia Welds Take on Bimetallic Fasteners, by W. B. Causey, Apr 6 p 63
Is Devaluation Another Economic Myth? by J. M. Beattie, Jan 27 p 43
Is U. S. Technology Slip Really Showing? by J. M. Beattie, May 4 p 63
It's Prime Time for Consumer Electronics, by K. W. Bennett, June 22 p 35
Low-Cost NC Closes the Loop, by J. E. Sandford, May 25 p 87
Magazine Holds 72 Tools for NC Punching, by B. D. Wakefield, Jan 20 p 38
The New Technology in Low Cost NC, by J. E. Sandford, June 1 p 48
New Tools from New Materials, by J. E. Sandford, Apr 13 p 59
Nuclear Equipment: Oh those Shipments! by J. M. Beattie, Mar 23 p 42
Programmed Controls Spark New Era in Detroit, by J. E. Sandford, Feb 10 p 81
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
The State of Flux in Static Drives, by R. A. Wilson, Mar 2 p 43
Those Wonderful Men and Their Amplifying Machines, by J. M. Beattie, May 25 p 67
Time Sharing Spreads a Wider Net, by J. E. Sandford, June 8 p 62
What's Behind the Successful Drive for Silicone Parts? by W. G. Patton, May 25 p 84

General Instrument Co.:

Multinationals: Labor Makes War! by J. D. Baxter, Jan 27 p 45

General Leisure Products, Inc.:

Mowers Cash in on 'Greening' in America, by K. W. Bennett, June 8 p 48

General Motors Corp.:

Aluminum Hoods Catch GM's Eye for '74 Cadillac? by D. N. Williams, June 8 p 47
Auto Emission Control: Suppliers Heyday? by D. N. Williams, Apr 13 p 45
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52
Automakers Put Fat Parts List on Diet, by D. N. Williams, June 22 p 37
Better Breathing in Parma, Ohio! May 18 p 45
Big 3 in Battle for New Market in Subcompact Wagons, by D. N. Williams, Feb 24 p 23
Boost Productivity of All—Including the Boss? by P. J. Cathey, May 18 p 27

The Bug and the Beetle Become U. S. Movie Stars for Productivity, by D. N. Williams, Mar 9 p 40
Buick Sparking Efforts to Meet Emission Laws, by D. N. Williams, Feb 10 p 25
Buyers Now Seek Service, Not Inventories, by G. J. McManus, Feb 24 p 47
Cadillac Begins GM's Standardization of Engine Plan, by D. N. Williams, May 11 p 24
Car Computers: I'll Drink to That!' by D. N. Williams, June 8 p 27
Car Interiors: All the Jazz is Moving to the Inside, by D. N. Williams, June 29 p 27
The Cheapest Solution in Town . . ., by J. M. Beattie, Feb 3 p 39
Closed Loop System Turns Waste Water Back into Oil, Mar 9 p 55
Cold Forming Occupies a Hot New Turf, by R. A. Wilson, May 11 p 52
Detroit in Driver's Seat as Trucks Boom, by D. N. Williams, May 25 p 70
Detroit Engine Sales Start to Purr in British Market, June 8 p 29
Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50
Emissions: An Exhausting Game of Politics, by D. N. Williams, Apr 13 p 23
GM and Ford: Mini-Trucks for Mini-Countries, by D. N. Williams, June 1 p 25
GM Plants Seeds to Develop CAM Machinery, by J. E. Sandford, Feb 24 p 53
GM Pushes Back Wankel Production, by D. N. Williams, Feb 24 p 50
GM Supplies: Anything We Can't Do You Can Do Better? by D. N. Williams, June 15 p 21
GM Wankel Tooling Grinds to a Start, by D. N. Williams, June 1 p 36
GM's Pushing to Develop Turbine Auto? by D. N. Williams, Jan 27 p 23
GM's Trucks: First Place or Bust? by D. N. Williams, Jan 20 p 13
Gas Engine's Life Far from Over, says Estes, by D. N. Williams, Mar 23 p 23
Greetings, Your Chevy is About to be Recalled! by D. N. Williams, Mar 2 p 21
Is U. S. Technology Slip Really Showing? by J. M. Beattie, May 4 p 63
Lordstown Shootout: Cost-Cutters vs. New Labor, by D. N. Williams and R. A. Wilson, Feb 3 p 38
Metal Failures Signalled by Electrons, Apr 6 p 27
Metal Foam Measures Impact of Collisions, Mar 2 p 23
New Tools from New Materials, by J. E. Sandford, Apr 13 p 59
Not All Reasons for Use of Aluminum are Light Weight, by James Beizer, Jan 13 p 65
Pension Bill: Going Back into Retirement? by K. A. Kaufman, May 18 p 43
Programmed Controls Spark New Era in Detroit, by J. E. Sandford, Feb 10 p 81
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Sentinel Program on the Lookout for GM Defects, by D. N. Williams, Mar 9 p 23
Steel Summary: It Has Been a Week for UPs, Feb 10 p 119
Sure, the Automakers are at Transpo, by D. N. Williams, June 1 p 40
Thinking Energy is "No Fault" at GM, by D. N. Williams, Jan 27 p 23
Tool and Die: Starting on the Road Back, by R. A. Wilson, Jan 27 p 50
Unbalanced Parts are Centerless Ground, by D. N. Williams, June 8 p 64
Wankel Engine Revs Up Tooling Orders, by D. N. Williams, Mar 16 p 55
Working May be Hazardous to Your Health, by D. N. Williams, Jan 20 p 22

Germany
Calcium Carbide Injected by Lance into Molten Pig, May 4 p 82
Cold Former from Germany Makes U.S. Debut, by R. A. Wilson, June 22 p 54
European Companies Hands on Large Jobs, by G. J. McManus, May 25 p 29
Korf Steel Group: To Hamburg from South Carolina, with Profit, by G. J. McManus, May 4 p 68
Materials Feeds Past the Tooling in New German Bar Machine, by B. D. Wakefield, May 25 p 88

Giddings & Lewis Machine Tool Co.:
Election Year '72 Forming as Profit Year for Tool Builders, by R. A. Wilson, Jan 6 p 86
Get it Together with Automatic Assembly, by R. A. Wilson, June 29 p 82
NEP, Devaluation Speed Pinto Engine Naturalization, by D. N. Williams, Jan 20 p 27

Gildemeister & Co.:
Material Feeds Past the Tooling in New German Bar Machine, by B. D. Wakefield, May 25 p 88

Gilman Engineering & Manufacturing Co.:
Get it Together with Automatic Assembly, by R. A. Wilson, June 29 p 82

Gilson Bros.:
Mowers Cashing in on 'Greening' in America, by K. W. Bennett, June 8 p 48

Gleason Reel Div.:
Another Safety Problem Rears Its Head, by B. D. Wakefield, Apr 6 p 59

Gleason Works
GM Wankel Tooling Grinds to a Start, by D. N. Williams, June 1 p 36
Grinder Smooths Wankel Production, by D. N. Williams, June 22 p 53
Wankel Engine Revs Up Tooling Orders, by D. N. Williams, Mar 16 p 55

Golconda Corp.:
Use Middle Managers to Key on Profits, by K. W. Bennett, Apr 13 p 53

Good Steel Service Inc.:
January Thaw Hits Metalworking Orders, by K. W. Bennett, Jan 27 p 46

B. F. Goodrich Co.:
Dialogue, Rapport or Task Forces to Deal with Youth? Jan 13 p 28

Government
Budget: Politics is Faster than Revenues, by K. A. Kaufman, Jan 27 p 47
Budget Red Ink Still Putting a Stain on Economy? by K. A. Kaufman, Feb 10 p 23
Federal Funds Accelerate Mass Transit, by T. C. DuMond, Mar 23 p 52
Federal Red Ink May Put a Blot on Inflation Curb, by K. A. Kaufman, June 29 p 25
Good for You Herman! by Gene Beaudet, Feb 17 p 5
Is Fed Mixing Money with Politics? by K. A. Kaufman, Jan 6 p 21
Metals Price Hikes Blow Economic Cool of Administration, by K. A. Kaufman, Mar 23 p 41
New Expropriation Rules are Pay or Get Cut Off, by K. A. Kaufman, Jan 27 p 21
Nixon Economists Desire More 'Stimulation' in '72, by K. A. Kaufman, Jan 13 p 23
Nixon Said that ($38B) about Decifit, Now it's this ($26B), by K. A. Kaufman, May 11 p 22
'Product Quality' is Buyer's Concern, says OMB Official, by K. A. Kaufman, Apr 6 p 21
Recovery: Optimism from Federal Seers, by K. A. Kaufman, Mar 9 p 21
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Steel to Connally: Sorry to See You Go, John? by K. A. Kaufman, May 25 p 25
Washington '72: Color it Political, by K. A. Kaufman, Jan 6 p 90
Weak EEDC Gets Anti-Bias Power Injection, by K. A. Kaufman, Mar 2 p 20
See also: Specific Federal, State and City Agencies

Granges Engineering Aktiebolag (Sweden)
Control Pollution Without Capital Outlay, by J. J. Obrzut, Mar 2 p 48
Will Metals' Recycling Need a Social Price Tag? by J. J. Obrzut, Jan 27 p 54

Graver Water Conditioning Div.:
Water Filters: High-Rate Clean-up; Low-Cost Tab, by C. J. Suchocki, June 29 p 29

G. A. Gray Co.:
Value Engineering Brings CNC into Focus, by R. A. Wilson, May 25 p 81

Gray & Ductile Iron Founders Society
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87

Gregg Iron Foundry
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87

Grinding
Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50
Fine Grain Super Tool Steels Make Fine Grinding Easier, Aug 20 p 90
Grinder Smooths Wankel Production, by D. N. Williams, June 22 p 53
High-Speed Grinder Has Continuous Output, by J. J. Obrzut, May 4 p 86
Unbalanced Parts are Centerless Ground, by D. N. Williams, June 8 p 64
Wankel Contours Present Grinding Challenge, Apr 6 p 60
Wankel Engine Revs Up Tooling Orders, by D. N. Williams, Mar 16 p 55

Grumman Aerospace Corp.:
F-14 Puts Advanced Technology to the Test, by R. R. Irving, June 15 p 55
Joining Processes Tackle Titanium for Aircraft Parts, June 8 p 31
President Says 'Blast Off' for Space Shuttle, by A. M. Greene, Jan 13 p 45

Gulf & Western Industries, Inc.:
Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50
Multiple Linkage Press Drives Looking Up, by B. D. Wakefield, May 18 p 62
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
What's Behind Machine Tool Curtain? by K. A. Kaufman and R. A. Wilson, June 8 p 46

H

Hammermills, Inc.:
Crvogenics Is Not a Fragment of Scrap's Imagination, by K. W. Bennett, May 18 p 47

Handy & Harman
The Silver Industry Takes Another Stab at Price Predicting, by James Beizer, Feb 10 p 121

Harbison-Walker Refractories Co.:
Buyers Now Seek Service, Not Inventories, by G. J. McManus, Feb 24 p 47

Harnischfeger Corp.:
Job Market Starts to Crack Open, by K. W. Bennett, G. J. McManus, D. N. Williams and R. A. Wilson, Apr 27 p 37

H. M. Harper Div.:
Computer Sets Charge Makeup for Steel, May 11 p 55

Harris-Intertype Corp.:
DNC: The Agony of Being First, Mar 30 p 45

Hayes-Albion Corp.:
A Third Coated Steel is Ready to Roll, by R. R. Irving, June 1 p 52

Hazen & Sawyer
Water, Water Everywhere—Even Some to Drink, by K. W. Bennett, June 15 p 43

Health Programs
Everybody Has to Lose Arizona Copper Case, by James Beizer, Jan 13 p 37
Got a Secret? So Protect It!, by C. J. Suchocki, June 15 p 22
The Jury is Out in OSHA Study of Compensation, by J. M. Beattie, Mar 16 p 61
OSHA: Guess Who Moved into the Executive Suite? Mar 30 p 27
OSHA Press Rules-Fuss, but Few Orders, by R. A. Wilson, May 25 p 73
OSHA Sets Standards Timetable, Mar 23 p 25
OSHA II, or Passing the Ball to the States, May 11 p 21
OSHAian Eve: To Catch a Thief, by C. J. Suchocki, June 15 p 22
OSHA's Forgotten Man Raises an Angry Cry! by C. J. Suchocki, May 4 p 25
Small Employers Put Safety Law on Trial, June 22 p 17
So You Think All Safety Cops Work for OSHA. Apr 6 p 25
To OSHA from Labor: Happy Un-Birthday, by C. J. Suchocki, Apr 27 p 42
Working May be Hazardous to Your Health, by D. N. Williams, Jan 20 p 22

Heat Treating
Abrasives and Heat Simplify Cutting-Off of Steel Bars, June 22 p 55
Computer Sets Charge Makeup for Steel, May 11 p 55
Make Your Heat Treating Furnace Hotter, by B. D. Wakefield, Apr 27 p 58
New Treatment Increases Toughness in Alloy Steels, June 8 p 61

Heatmaster International, Inc.:
Make Your Heat Treating Furnace Hotter, by B. D. Wakefield, Apr 27 p 58

Hecla Mining Co.:
New Line on Silver: It isn't So Clouded, by James Beizer, June 22 p 65

Heinemann Saw & Mfg. Co.:
Carbide Saw Gives U. S. an Import Blocker, by B. D. Wakefield, Apr 13 p 65

Heppenstall Co.:
Buyers Now Seek Service, Not Inventories, by G. J. McManus, Feb 24 p 47

Hergenrather & Co.:
First Job in Getting a Good Man—Sound Job Description, June 22 p 25

Guess Who—Among Managers—Gets Blame for Recession? by P. J. Cathey, May 25 p 31

Hewlett-Packard Co.:
Ending Social Ills: Can Business Do it Better than U.S.? May 4 p 27

Hi-Dense Div.:
Bearings Seek Economy in New Methods, by T. C. DuMond, Apr 27 p 51

Hill Acme Co.:
Industry Opens its Purse, by G. J. McManus, Mar 23 p 39
Tool Builders Tap Pent-Up Demand, by R. A. Wilson, Feb 3 p 44

Hobart Brothers Co.:
OSHA Gets Welders up Tight About Smoking, by R. A. Wilson, Feb 24 p 51
Welding is a Domestic Affair, by D. N. Williams, Apr 20 p 71

Hobart Mfg. Corp.:
Giants Go, but Small Wares Prosper, by K. W. Bennett, Mar 23 p 44

Hofstra University
All About Time, Railings, Doors, Chairs—Abroad, Mar 16 p 29

Holo-Krome Co.:
Phosphate Coating Solves Problems in Bolt Tightening, June 22 p 27

Honeycomb
See: Sandwich Construction.

Honeywell, Inc.:
The Dawning of a New Age of Electronics? by K. W. Bennett, Feb 3 p 40
Maxis to Minis, Computers are Calculating Gains, by K. W. Bennett, May 11 p 39

Hoover Co.:
Giants Go, but Small Wares Prosper, by K. W. Bennett, Mar 23 p 44

Houdaille Industries, Inc.:
Machine Builders: Again, Hopeful Hearts, by R. A. Wilson, Mar 2 p 38

House of Stainless
Unlock Dollars Frozen in Inventories, by K. W. Bennett, Apr 20 p 67

Hudson Institute
Good for You Herman! by Gene Beaudet, Feb 17 p 5

Hughes Aircraft Co.:
The Dawning of a New Age of Electronics? by K. W. Bennett, Feb 3 p 40

Hunt Co.:
First Step in Getting a Good Man—Sound Job Description, June 22 p 25

Hurco Mfg. Co., Inc.:
Press Brake Forming Can be Fast and Safe, by B. D. Wakefield, May 18 p 60

Hyde Corp.:
Planning on Managing? Here are Some Tips, by P. J. Cathey, May 25 p 31

Hydraulic Forming
Oil Squeezes Out Low-Cost Forms, by T. H. Malim, Jan 20 p 57

I

IIT Research Institute
Is There a Better Way to Build Pipelines? by B. D. Wakefield, Mar 2 p 46

Illinois Pollution Control Board
City Pollution Backlashes on Capito(a)l, by K. W. Bennett, June 1 p 38

Industrial Briefs, Name Changes, Mergers, Acquisitions and Contracts

Industrial Motivation, Inc.:
Lots of BAD Ideas Make Cost-Saving Good, by P. J. Cathey, Mar 9 p 44

Industrial Ovens, Inc.:
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87

Industrial Relations
All About Time, Railings, Doors, Chairs—Abroad, Mar 16 p 29
Archie Bunker Meets "The Bull of the Woods", by Gene Beaudet, June 1 p 5
The Cheapest Solution in Town . . ., by J. M. Beattie, Feb 3 p 39
Dollars Devalued by Bored Workers, by J. M. Beattie, Feb 24 p 52
Don't Forget, The Worst Fears are Imaginary, by Gene Beaudet, Feb 24 p 5
Lordstown Shootout: Cost-Cutters vs. New Labor, by D. N. Williams and R. A. Wilson, Feb 3 p 38
The Puzzle of Productivity, by G. J. McManus and J. M. Beattie, Mar 9 p 40
The Search for America, Inc., by G. J. McManus, Jan 6 p 95

Industrial Security
How to Catch a Thief-by Chrysler! by D. N. Williams, Feb 3 p 23
Wanted: For Crimes Against Business-White-Collar Mafia, by P. J. Cathey, Mar 2 p 35

Information Management International Corp.:
When it Rains Information, Managers Stay Dry, Feb 24 p 27

Information Systems
Data Banks Serve Industry's Need to Know, by A. M. Greene, Apr 6 p 57
Time Sharing Spreads a Wider Net, by J. E. Sandford, June 8 p 62

Ingersoll Milling Machine Co.:
Job Market Starts to Crack Open, by K. W. Bennett, G. J. McManus, D. N. Williams and R. A. Wilson, Apr 27 p 37
Materials Handling to Outdo NC on Machine Tools? by J. E. Sandford, June 1 p 41
Transfer Machine Builders Line Up for Foreign Stations, by K. W. Bennett, Apr 6 p 46

Ingersoll-Rand Co.:
Fastener Torque Checked Constantly on Assembly Line, Jan 20 p 15
A Light Appears at the End of Tunneling Market, by K. W. Bennett, June 29 p 66

Ingots
Chicago Mill Ends Leaker Problem in Pouring Big Ingots, by B. D. Wakefield, Jan 27 p 61

Inland Steel Co.:
Coil Coaters Back on Growth Curve, But See No Technical Breakthroughs for Year, by B. D. Wakefield and K. W. Bennett, Feb 3 p 56
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77
Hot Coil Handling Cut by One-Third, Mar 9 p 55
Steel Labor '74: Dispensing with Crisis Tactics, Mar 16 p 21
Steel Summary: Industry Loses the Blues, June 1 p 65

Industries, Keyed Number for Reader Information Service

Inspiration Consolidated Copper Co.:
Everybody Has to Lose Arizona Copper Case, by James Beizer, Jan 13 p 37

Institute of Scrap Iron & Steel, Inc.:
It's a New Year for Scrap in Many Ways, Jan 27 p 71
Steel's Iron Mine Can be the City Dump, by G. J. McManus, Mar 23 p 57
Will Metals' Recycling Need a Social Price Tag? by J. J. Obrzut, Jan 27 p 54

Insurance
Industry's New Watchdog: The Insurance Company, by J. M. Beattie, Mar 16 p 58

Insurance Company of North America
Industry's New Watchdog: The Insurance Company, by J. M. Beattie, Mar 16 p 58
The Jury is Out on OSHA Study of Compensation, by J. M. Beattie, Mar 16 p 61

Insurance Institute for Highway Safety
Can Computers: 'I'll Drink to That!' by D. N. Williams, June 1 p 27

Interlake, Inc.:
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77
Will Metals' Recycling Need a Social Price Tag? by J. J. Obrzut, Jan 27 p 54

Interpart, Inc.:
Is Licensing in Danger from Exports? by K. W. Bennett, Mar 16 p 60

International Assn. of Machinists
IAM: PB Spins $53 Million Windfall to Employers, Apr 13 p 19

International Brotherhood of Teamsters
Hoffa is Sentenced to Union Picnics and Dinners, Jan 6 p 19

International Business Machines Corp.:
The Search for America, Inc., by G. J. McManus, Jan 6 p 95

International Council of Copper Exporting Countries
Copper Market is Thinning Down in Strength, by James Beizer, Mar 30 p 85

International Harvester Corp.:
Green Expectations for U. S. Exports? by K. W. Bennett, Jan 6 p 88
Mowers Cashing in on 'Greening' in America, by K. W. Bennett, June 8 p 48
Value Engineering: It's Come a Long Way, by B. D. Wakefield, Mar 16 p 75

International Iron & Steel Institute
SSC: Orders Indicate Recovery Continues, by Gene Beaudet, May 18 p 48

International Lead-Zinc Research Organization
Gas War-or How to Keep the Lead In, by C. J. Suchocki, May 18 p 25

International Longshoremen's and Warehousemen's Union
Dock Strike: Quick-End Plea Moves Slowly, Feb 3 p 19
Dock Pacts: A Test of Flexibility of Politics? Mar 9 p 19
ILA Weigh Contract Okay Despite Some Dissenters, Mar 16 p 21
Labor Reform: It's that Time Again, Jan 27 p 19
West Coast Dockers End 'Longest' Strike, Feb 17 p 19
West Coast Docks Reopen; No-Strike Pledge Okayed, Feb 24 p 19
Will Dock Strike Trigger Reform Law? Feb 10 p 66

International Mill Service Div.:
Control Pollution Without Capital Outlay, by J. J. Obrzut, Mar 2 p 48
Will Metals' Recycling Need a Social Price Tag? by J. J. Obrzut, Jan 27 p 54

International Nickel Co.:
Discount Malady Overcomes Nickel Prices, by James Beizer, Mar 9 p 69
Nickel Orders on the Way Up. Prices, Too? by James Beizer, Jan 6 p 165

International Relations
Getting into New World Markets: Or Bring Back Licensing, June 22 p 23
Is Licensing in Danger from Exports? by K. W. Bennett, Mar 16 p 60
New Expropriation Rules are Pay or Get Cut Off, by K. A. Kaufman, Jan 27 p 21
Quotas: 'About the Best We Could Get', by G. J. McManus, Jan 20 p 28
Taiwan Shifting its Policies for New Trade? Mar 16 p 27
U. S. Executive Finds Japan's Managers 'Stunned', Apr 27 p 23
U.S. Plays White Chips in Blue-Chip Game? by J. D. Baxter, Mar 9 p 35
A World Recession in 1972? No, Not Really, Jan 6 p 25

International Systems Design, Inc.:
Data Banks Serve Industry's Need to Know, by A. M. Greene, Apr 6 p 57

International Telephone & Telegraph Corp.:
Computer Sets Charge Makeup for Steel, May 11 p 55
Lots of BAD Ideas Make Cost-Saving Good, by P. J. Cathey, Mar 9 p 44

International Union of Electrical, Radio and Machine Workers
IUE Queries Nixon on U.S.-Formosa Issues, Mar 16 p 27

International Union of Electrical Workers
Multinationals: Labor Makes War! by J. D. Baxter, Jan 27 p 45

International Utilities Corp.:
Control Pollution Without Capital Outlay, by J. J. Obrzut, Mar 2 p 48

International—Weekly Reports (See Also Subject Classification, Foreign Trade, International Relations and Individual Countries)

Inventories
Appliance Makers Caught with Inventories Down? by K. W. Bennett, Mar 2 p 32
Buyers Now Seek Service, Not Inventories, by G. J. McManus, Feb 24 p 47
Durables Catalogs Low; Time to Stock Up? by J. D. Baxter, Jan 13 p 42

Industry Opens its Purse, by G. J. McManus, Mar 23 p 39
Inventories: Recovery's Missing Link, by K. A. Kaufman, G. J. McManus and R. A. Wilson, June 8 p 44
Too Much Month Left at the End of the Money, by R. A. Wilson, Feb 17 p 40
Unlock Dollars Frozen in Inventories, by K. W. Bennett, Apr Apr 20 p 67

Iron Ore

The Exhausting Problems of Resources, by K. A. Kaufman and James Beizer, Apr 20 p 70
Ore Men Iron Out Their Problems, by R. A. Wilson, Apr 13 p 46

J

F. L. Jacobs Co.:

Profit Crunch Tames Union Urges, by D. N. Williams, Feb 10 p 67

Jacobsen Mfg. Co.:

Mowers Cash in on 'Greening' in America, by K. W. Bennett, June 8 p 48

Japan

Eximbank Urges Sales Effort Push in Japanese Markets, by K. A. Kaufman, May 4 p 21
Japanese Bearings—All the Way from Chatsworth, Calif.? by James Beizer, June 29 p 67
Japan's Trade Plan: Investments Up, Exports Down? Mar 2 p 22
Trade Breaks for U.S. Trigger Release of Gold Price Bill, by K. A. Kaufman, Feb 17 p 43
UAW vs. Japan: A Different Kind of Workstyle, Apr 27 p 17
U. S. Executive Finds Japan's Managers 'Stunned', Apr 27 p 23
U. S. Steel Men Intrigued by Japan's Huge Blast Furnace, by G. J. McManus, May 18 p 59
Wankel Barbs are Competitor Sour Grapes, Says Mazda, by D. N. Williams, June 22 p 21

Jarva, Inc.:

A light Appears at the End of Tunneling Market, by K. W. Bennett, June 29 p 66

Jeffrey Mfg. Co.:

Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87

Jessop Steel Co.:

Quota: Not the 'Whole' Thing, but . . ., by K. A. Kaufman, May 11 p 38

Johns Hopkins University

OSHA's Forgotten Man Raises an Angry Cry! by C. J. Suchocki, May 4 p 25

Joining

Joining Processes Tackle Titanium for Aircraft Parts, June 8 p 31
Solid State Joints Formed Under Electromagnetic Pressure, by J. J. Obrzut, Apr 20 p 92

Jones & Lamson Div.:

A/C: Rare Bird that's Drawing a Crowd, by K. W. Bennett, May 4 p 65

Jones & Laughlin Steel Corp.:

Buyers Now Seek Service, Not Inventories, by G. J. McManus, Feb 24 p 47
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77
1972 is Like 1966—or at Least 80 Pct. of It, June 22 p 63
Ore Men Iron Out Their Problems, by R. A. Wilson, Apr 13 p 46
Utilization: More May Not be Better, by G. J. McManus, Apr 27 p 39

Earle M. Jorgensen Co.:

January Thaw Hits Metalworking Orders, by K. W. Bennett, Jan 27 p 46

Joy Mfg. Co.:

Defense Budget Needed Rx for Wheezing Aerospace, by G. J. McManus, Feb 3 p 43
EPA: Shake Things Up and Worry Later, by G. J. McManus, Mar 2 p 36
The Search for America, Inc., by G. J. McManus, Jan 6 p 95

K

Herman Kahn

Good for You, Herman! by Gene Beaudet, Feb 17 p 5

Kaiser Aluminum & Chemical Corp.:

Aluminum, Stainless Prices: Going Down the Up Stairs, by James Beizer, May 11 p 41
Kaiser Trying for Better Prices on Aluminum, by James Beizer, Mar 16 p 123
Nonferrous '71: Crying All the Way to the Bank, by James Beizer, Feb 17 p 45

Kaiser Steel Corp.:

Buyers Now Seek Service, Not Inventories, by G. J. McManus, Feb 24 p 47
USWA Strikes Kaiser in 'Sharing' Dispute, Feb 10 p 21

Kama River

Paybacks before Payoffs, June 22 p 39

Kaman Aerospacae Corp.:

Fill the Management Void in R&D Planning, by S. H. Hockenberry, Mar 23 p 48

A. T. Kearney & Co., Inc.:

Great Expectations for U.S. Exports? by K. W. Bennett, Jan 6 p 88
Productivity Upsurge in Office? If You Try—Yes, May 4 p 27
Unlock Dollars Frozen in Inventories, by K. W. Bennett, Apr 20 p 67

Kearney & Trecker Corp.:

Election Year '72 Forming as Profit Year for Tool Builders, by R. A. Wilson, Jan 6 p 86
An 'Impossible' Part Meets NC Tape, Jan 20 p 37
How Much Capacity is Really Useable? by R. A. Wilson, June 15 p 48
Job Market Starts to Crack Open, by K. W. Bennett, G. J. McManus, D. N. Williams and R. A. Wilson, Apr 27 p 37
Machine Tools: Caveat Gets Empted, by R. A. Wilson, May 11 p 40
Profit Crunch Tames Union Urges, by D. N. Williams, Feb 10 p 67
Value Engineering Brings CNC into Focus, by R. A. Wilson, May 25 p 81

Kelsey-Hayes Co.:

Electric Disc Brakes Beats the Drum for Boat Trailers, by D. N. Williams, Jan 13 p 25

Kennametal, Inc.:

Carbide Slitting: When it Works and Why, Feb 17 p 59
The Search for America, Inc., by G. J. McManus, Jan 6 p 95

Kennecott Copper Corp.:

Brass Mills Took Turn for the Worst in 1971, by James Beizer, Feb 21 p 75
Copper Waits, and Waits, and Waits for a Better Economy, by James Beizer, Feb 3 p 71
The Helter-Skelter Smelter Case Keeps on Rollin' Along, by James Beizer, June 15 p 73
Kennecott's Top Men on Supply, Price, Pollution, by James Beizer, Jan 20 p 29
Nonferrous Chiefs See Improvement in Business Outlook, by James Beizer, May 11 p 73
Nonferrous Earnings Plunge to Lowest Level in Years in Sluggish Economy, by James Beizer, Apr 27 p 45
Probe Senses Oxygen in Molten Copper, Mar 30 p 66

Keystone Consolidated Industries, Inc.

Wiremen Eye New Mills and Materials, by B. D. Wakefield, May 4 p 79

Keystone Steel & Wire Co.:

Wiremen Eye New Mills and Materials, by B. D. Wakefield, May 4 p 79

Kilns

See: Furnaces

Klein Institute for Aptitude Evaluation

Dialogue, Rapport or Task Forces to Deal with Youth? Jan 13 p 28

Koehler Co.:

Mowers Cash in on 'Greening' in America, by K. W. Bennett, June 8 p 48

Koppers Co., Inc.:

Coming Soon: French LWS Process for Steelmaking, by G. J. McManus, June 29 p 80
Furnace Feed Simplifies Loading, by G. J. McManus, Apr 27 p 55
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77
How Companies Can Improve Society—and Themselves, June 29 p 31
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Spend Now or Miss the Boat? by G. J. McManus, Apr 6 p 44

Korf Industrie und Handel GmbH und Co.:

Korf Steel Group: To Hamburg from South Carolina, with Profit, by G. J. McManus, May 4 p 68

L

Labor

Abel Canes PB: Like Flogging a Dead Horse, Mar 9 p 19
Abel Hails 'Pro' Pay Plan; Rips Construction Hikes, Mar 2 p 19
Aero Veto: Harbinger of the Hardline? Jan 13 p 21
And Now, the Politics of Matzoh Balls! Apr 6 p 43
Britain Beset by Coal Strike, Labor Woes, Feb 17 p 25
Building Trades: 'God Bless America' and Kill the Scabs, June 29 p 23
Construction: Have Your Cake and Eat it Too! May 4 p 19
Court Pulls Plug on NLRB's Successor Powers, May 25 p 23
Dock Pacts: A Test of Flexibility of Politics? Mar 9 p 19
Dock Strike: Quick-End Plea Moves Slowly, Feb 3 p 19
Four-Day Week Needs Game Plan for Success, by C. J. Suchocki, Mar 16 p 65
Hoffa is Sentenced to Union Picnics and Dinners, Jan 6 p 19
IAM: PB Spins $53 Million Windfall to Employers, Apr 13 p 19
ILA Weighs Contract Okay Despite Some Dissenters, Mar 16 p 21
IUE Queries Nixon on U.S.-Formosa Issues, Mar 16 p 27
Job Erosion: Win Some; Lose Some, Apr 13 p 19
Jobless Rate: There's a Bright Side, Too, Jan 27 p 19
Labor '72: Planning Bumps Demanding, by C. J. Suchocki, Jan 13 p 40
Labor Reform: It's that Time Again, Jan 27 p 19
Labor 2040: Population Crisis or Fertility Rite? June 1 p 21
Meany Uses Price Panel to Grind Labor's Axe, Apr 6 p 19
Meany's Mutiny Seeks Political Bounty, Mar 30 p 19
Multinationals: Labor Finds No Help at Commerce, Feb 10 p 21
Multinationals: Labor Makes War! by J. D. Baxter, Jan 27 p 45
NAB II: A New Look in Hard-Core Training, June 8 p 23
PB Tackles Shifting Merit Raises—Again, Apr 20 p 19
Pay Board: Another Game of 'Catch', Feb 3 p 19
Pay Board Defrosts Back Pay, Jan 20 p 11
Pay Board: Ruling Against the Rulemakers? Feb 17 p 19
Pay Board Turns Down Screws on Deferred Wages, June 15 p 19
Pay Board Works Out the Fringes, Mar 2 p 19
Profit Crunch Tames Union Urges, by D. N. Williams, Feb 10 p 67
The Puzzle of Productivity, by G. J. McManus and J. M. Beattie, Mar 9 p 40
Rail Crisis Awakens Labor Reformers, Mar 23 p 19
Reporter's Notebook: The Death of Soul, by W. J. Kalb, May 4 p 66
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Small Employers Put Safety Law on Trial, June 22 p 17
Steel Labor '74: Dispensing with Crisis Tactics, Mar 16 p 21
To OSHA from Labor: 'Happy Un-Birthday, by C. J. Suchocki, Apr 27 p 42
UAW: Only the Name's the Same, by C. J. Suchocki, May 4 p 66
UAW vs Japan: A Different Kind of Workstyle, Apr 27 p 17
UMW Presents: A Modern-Day Morality Play, May 18 p 19
USWA Strikes Kaiser in 'Sharing' Dispute, Feb 10 p 21
Unemployment: Inflation at Any Rate, Feb 24 p 19
War and Peace: Unions Declare War to End War, May 11 p 21
West Coast Dockers End 'Longest' Strike, Feb 17 p 19
West Coast Docks Reopen: No-Strike Pledge Okayed, Feb 24 p 19
Who's Running Things Around Here? by Gene Beaudet, Mar 2 p 5
Will Dock Strike Trigger Reform Law? Feb 10 p 66

Lamson & Sessions Co.:

Cold Former from Germany Makes U.S. Debut, by R. A. Wilson, June 22 p 54

Lasers

Laser Blasts 7200 Holes Each Minute, Feb 24 p 67
Smog Control: 'I Shot a Laser into the Air . . .', Apr 20 p 25

Lathes

Machine Tools: Caveat Gets Empted, by R. A. Wilson, May 11 p 40
The New Technology in Low Cost NC, by J. E. Sandford, June 1 p 48
Tooling Materials Push Lathe Limits, by R. A. Wilson, Mar 9 p 38
Value Engineering Brings CNC into Focus, by R. A. Wilson, May 25 p 81

Latrobe Steel Co.:

Abrasives and Heat Simplify Cutting-Off of Steel Bars, June 22 p 55

Law and Legal

Beware Liability Rabbit-Punch—it's Deadly, May 11 p 44
Wanted: For Crimes Against Business—White-Collar Mafia, by P. J. Cathey, Mar 2 p 35

Lawn Mowers
Mowers Cash in on 'Greening' in America, by K. W. Bennett, June 8 p 48

Jack Lawrence & Co., Inc.:
First Step in Getting a Good Man—Sound Job Description, June 22 p 25

Lawrence Div.:
A Light Appears at the End of the Tunneling Market, by K. W. Bennett, June 29 p 66

Lead
Asarco Leads Lead Price Increase, by James Beizer, Feb 10 p 121
Gas War—or How to Keep the Lead In, by C. J. Suchocki, May 18 p 25
What are the Price Prospects for Copper, Lead, Zinc? by James Beizer, June 29 p 109

Lead Industries Assn.:
Zinc: My 'Bounty' Lies Over the Ocean? by James Beizer, Apr 13 p 48

Lear Siegler, Inc.:
Pot Broach Doubles Part Production, June 29 p 81

Leasco Data Processing Equipment Corp.:
Beware Liability Rabbit-Punch—it's Deadly, May 11 p 44

LeBlond, Inc.:
The New Technology in Low Cost NC, by J. E. Sandford, June 1 p 48
Tool Builders Tap Pent-Up Demand, by R. A. Wilson, Feb 3 p 44

Legislation
George Wallace and Hartke-Burke? by Gene Beaudet, Apr 6 p 5
Mills Tax Bill Makes Some Mountains on Capitol Hill, by K. A. Kaufman, June 15 p 20
Nixon-Industry Combo Fail to Dent New Pollution Law, by K. A. Kaufman, Mar 23 p 21
Nixon Trucking Bill: 'To Brink of Disaster and Beyond . . .'? by D. N. Williams, June 15 p 45
Now, Before You Choose Up Sides . . ., by Gene Beaudet, Mar 9 p 5
Pension Bill: Going Back into Retirement? by K. A. Kaufman, May 18 p 43
Rhodesian Chrome: Don't Import, Import, Don't . . . by K. A. Kaufman, June 1 p 23
Safety Agency: For the People, by the People, of the . . ., by K. A. Kaufman, Mar 30 p 21
Small Employers Put Safety Law on Trial, June 22 p 17
Social Security: The Worst is Yet to Come, by K. A. Kaufman, June 22 p 19
Tax Reform in Election Year: A White Elephant? by K. A. Kaufman, Feb 17 p 21
The Tax Reformers: Or, You Have to Hand it to Them! June 8 p 25
Valued-Added Tax: A Pox at the Ballot Box, by K. A. Kaufman, Jan 20 p 12
Washington '72: Color it Political, by K. A. Kaufman, Jan 6 p 90
Will Dock Strike Trigger Reform Law? Feb 10 p 66

LETTER TO THE EDITOR, Information Feedback from Readers

Lincoln Electric Co.:
Welding is a Democratic Affair, by D. N. Williams, Apr 20 p 74

Lindberg Corp.:
There is No "Energy Crisis", But . . ., by B. D. Wakefield, Mar 9 p 49

Linde Div.:
Welding is a Domestic Affair, by D. N. Williams, Apr 20 p 74

Arthur D. Little, Inc.:
Fill the Management Void in R &D Planning, by S. H. Hockenberry, Mar 23 p 48
Unlock Dollars Frozen in Inventories, by K. W. Bennett, Apr 20 p 67

Litton Industries:
Lucas Fields its Front Four, by R. A. Wilson, Feb 3 p 53
The State of Flux in Static Drives, by R. A. Wilson, Mar 2 p 43

Lockheed Aircraft Corp.:
Court Pulls Plug on NLRB's Successor Powers, May 25 p 23

Lockheed Missiles and Space Co.:
Orbiter Material Takes 100 Cycles at 2500°F, Feb 17 p 27
President Says 'Blast Off' for Space Shuttle, by A. M. Greene, Jan 13 p 45

Lodge & Shipley Co.:
Net New Orders for Machine Tools March to New High, Apr 27 p 11
New Cutting Tool Material Moves into Production Stage, by R. A. Wilson, May 11 p 54
Tool Builders Tap Pent-Up Demand, by R. A. Wilson, Feb 3 p 44
Tooling Materials Push Lathe Limits, by R. A. Wilson, Mar 9 p 38

Lubricants
Oil Squeezes Out Low-Cost Forms, by T. H. Malim, Jan 20 p 37
Phosphate Coating Solves Problems in Bolt Tightening, June 22 p 27
What's Behind the Successful Drive for Silicone Parts? by W. G. Patton, May 23 p 84

Lucas Machine Div.:
Lucas Fields its Front Four, by R. A. Wilson, Feb 3 p 53

Lukens Steel Co.:
Nuclear Equipment: Oh those Shipments! by J. M. Beattie, Mar 23 p 42
When Energy Crunch Crunches, by J. M. Beattie and P. J. Cathey, Apr 27 p 40

Mc

M-C Control Co., Inc.:
Programmed Controls Spark New Detroit Era, by J. E. Sandford, Feb 10 p 81

McCreary Industrial Products Co.:
Glass Beads Guard Rolls During Pickling, Feb 24 p 64

McDonnell Douglas Astronautics Co.:
Net New Orders for Machine Tools March to New High, Apr 27 p 11
President Says 'Blast Off' for Space Shuttle, by A. M. Greene, Jan 13 p 45

McGraw Edison Co.:
Giants Go, but Small Wares Prosper, by K. W. Bennett, Mar 23 p 44

McNeill-Akron Div.:
Old Crane Steps Aside for Straddle Carrier, by B. D. Wakefield, Mar 30 p 67

McNeil Corp.:
Machine Blanks Precision Parts in Single Stroke, Feb 17 p 58
Old Crane Steps Aside for Straddle Carrier, by B. D. Wakefield, Mar 30 p 67

M

MHD
See: Plasma Technology

MPB Corp.:
Bearings Seek Economy in New Methods, by T. C. DuMond, Apr 27 p 51

Machinability Data Center
New Tools from New Materials, by J. E. Sandford, Apr 13 p 59

Machine Tools
A/C: Rare Bird that's Drawing a Crowd, by K. W. Bennett, May 4 p 65
Basic Machine Tool Builder Continuous Challenging Imports, by J. E. Sandford, Mar 9 p 42
The Best is Yet to Come, by Gene Beaudet, June 22 p 43
Drop-Out Manager Turns on Controls, by K. W. Bennett, Apr 13 p 49
Election Year '72 Forming as Profit Year for Tool Builders, by R. A. Wilson, Jan 6 p 86
Get it Together with Automatic Assembly, by R. A. Wilson, June 29 p 82
An 'Impossible' Part Meets NC Tape, Jan 20 p 37
Increasing Output is Job for Machines-Not People, by J. E. Sandford, Feb 10 p 71
Lucas Fields its Front Four, by R. A. Wilson, Feb 3 p 53
Machine Blanks Precision Parts in Single Stroke, Feb 17 p 58
Machine Builders: Again, Hopeful Hearts, by R. A. Wilson, Mar 2 p 38
Machine Tool Market: Going, Going . . ., by Gene Beaudet and R. A. Wilson, Mar 30 p 50
Machine Tools: Caveat Gets Empted, by R. A. Wilson, May 11 p 40
Magazine Holds 72 Tools for NC Punching, by B. D. Wakefield, Jan 20 p 38
Material Feeds Past the Tooling in New German Bar Machine, by B. D. Wakefield, May 25 p 88
Materials Handling to Outdo NC on Machine Tools? by J. E. Sandford, June 1 p 41
Net New Orders for Machine Tools March to New High, Apr 27 p 11
New Products Boost Machine Builders, by R. A. Wilson, June 29 p 65
The New Technology in Low Cost NC, by J. E. Sandford, June 1 p 48
OSHA Press Rules-Fuss, but Few Orders, by R. A. Wilson, May 25 p 73
Press Stops When Arm Breaks Light Beam, Feb 10 p 85
SME Gonference Stresses Computers, Apr 13 p 69
Special Machine Orders Boom in Early '72, by K. W. Bennett, Mar 30 p 49
The State of Flux in Static Drives, by R. A. Wilson, Mar 2 p 43
Swedish Drill Fills Gap in U. S. Market, by B. D. Wakefield, Feb 24 p 62
Tool Builders Tap Pent-Up Demand, by R. A. Wilson, Feb 3 p 44
Tooling Materials Push Lathe Limits, by R. A. Wilson, Mar 9 p 38
Transfer Machine Builders Line Up for Foreign Stations, by K. W. Bennett, Apr 6 p 46
Value Engineering Brings CNC into Focus, by R. A. Wilson, May 25 p 81
Wankel Engine Revs Up Tooling Orders, by D. N. Williams, Mar 16 p 55
Wankel, Wankel, Little Car, How They Wonder How You Are, by D. N. Williams, Mar 30 p 23
Warner & Swasey Veers Back to Machine Tools, Jan 6 p 13
What's Behind Machine Tool Curtain? by K. A. Kaufman and R. A. Wilson, June 8 p 46

Machinery and Allied Products Institute
Justifying New Machines: It's Not So Tough, by K. W. Bennett, Feb 24 p 56

Machining
Can't Cut Hard Material? "Blast" it Away, Apr 13 p 63
Ceramics Begin to Answer Industry's Burning Questions, by A. M. Greene, June 22 p 48
Machine Blanks Precision Parts in Single Stroke, Feb 17 p 58
New Cutting Tool Material Moves into Production Stage, by R. A. Wilson, May 11 p 54
Value Engineering Brings CNC into Focus, by R. A. Wilson, May 25 p 81

Macotech, Inc.:
A/C: Rare Bird that's Drawing a Crowd, by K. W. Bennett, May 4 p 65

Magic Chef Co.:
Want Price Rise? How's Your Productivity Rate? by J. D. Baxter, Feb 10 p 74

Magma Copper Co.:
Everybody Has to Lose Arizona Copper Case, by James Beizer, Jan 13 p 37

Magnaflux Corp.:
Justifying New Machines: It's Not So Tough, by K. W. Bennett, Feb 24 p 56
NDT: Process Control or Legal Defense? by B. D. Wakefield, Jan 27 p 60

Magnavox Corp.:
Value Engineering: It's Come a Long Way, by B. D. Wakefield, Mar 16 p 75

Magnesium
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52

Management
All About Time, Railings, Doors, Chairs—Abroad, Mar 16 p 29
Bad Marriage Hurts Career, Not Vice Versa, June 29 p 31
Being Successful and Miserable-at Same Time, Mar 23 p 27
Beware Liability Rabbit-Punch—it's Deadly, May 11 p 44
Boost Productivity of All—Including the Boss? by P. J. Cathey, May 18 p 27
Dialogue, Rapport or Task Forces to Deal with Youth? Jan 13 p 28
Does Your Company Keep its Know-How Secret? Wise Up, Jan 20 p 14
Dollar Devalued by Bored Workers, by J. M. Beattie, Feb 24 p 52
Don't Forget, The Worst Fears are Imaginary, by Gene Beaudet, Feb 24 p 5
Ending Social Ills: Can Business Do it Better than U.S.? May 4 p 27
Every Manager Can Learn to Live with Phase II, Feb 10 p 29
Fill the Management Void in R &D Planning, by S. H. Hockenberry, Mar 23 p 48
First Step in Getting a Good Man—Sound Job Description, June 22 p 25
Four-Day Week Needs Game Plan for Success, by C. J. Suchocki, Mar 16 p 65
Future Managers: Spot Them Fast, Challenge Them Often, by P. J. Cathey, June 15 p 23
Guess Who—Among Managers—Gets Blame for Recession? by P. J. Cathey, May 25 p 31

Hire Top Managers Who Know Buyer's Problems, by R. A. Wilson, June 1 p 44
How Companies Can Improve Society—and Themselves, June 29 p 31
Industry's New Watchdog: The Insurance Company, by J. M. Beattie, Mar 16 p 58
Justifying New Machines: It's Not So Tough, by K. W. Bennett, Feb 24 p 56
Kennecott's Top Men on Supply, Price, Pollution, by James Beizer, Jan 20 p 29
Lots of BAD Ideas Make Cost-Saving Good, by P. J. Cathey, Mar 9 p 44
Managers Arise to Defend Technology from the Wolves, by P. J. Cathey, Apr 20 p 27
Managers Profit from Financial Awareness, by S. H. Hockenberry, Mar 2 p 39
OSHA: Guess Who Moved into the Executive Suite? Mar 30 p 27
Planning on Managing? Here are Some Tips, by P. J. Cathey, May 25 p 31
Plant Costs aren't Far Out in Far East, by J. D. Baxter, May 25 p 76
Pollution Control: Rinse Out a Profit, by R. A. Wilson, Feb 17 p 48
Productivity: Like Motherhood, But-, by P. J. Cathey, June 1 p 39
Productivity Upsurge in Office? If You Try—Yes, May 4 p 27
Profit-Eating File Cabinets Must be Made to Heel, Apr 13 p 27
Profit Planning: An Exercise Open to All, June 8 p 52
Restless Fast-Track Men are Entering Too Many Races, by P. J. Cathey, Apr 27 p 25
The Search for America, Inc.. by G. J. McManus, Jan 6 p 95
Sure He Heard You, But Still Put it in Writing, Mar 23 p 27
Teachers Working and Learning-in Industry? Jan 27 p 27
U. S. Executive Finds Japan's Managers 'Stunned', Apr 27 p 23
Use Middle Managers to Key on Profits, by K. W. Bennett, Apr 13 p 53
Value Engineering: It's Come a Long Way, by B. D. Wakefield, Mar 16 p 75
Want Price Rise? How's Your Productivity Rate? by J. D. Baxter, Feb 10 p 74
When it Rains Information, Managers Stay Dry, Feb 24 p 27
Why Corporate Managers Need to Listen Well, Apr 13 p 27
Will '72 be Year of the Manufacturing Manager? Jan 6 p 27

Manco Mfg. Co.:
U.S. Manufacturers Out for Blood in Export Game? by K. W. Bennett, Mar 9 p 36

Manufacturing Engineering
Will '72 be Year of the Manufacturing Manager? Jan 6 p 27

Market Digest, Weekly Page of Marketing

Marketing
Copper Market is Thinning Down in Strength, by James Beizer, Mar 30 p 85
Getting into New World Markets: Or Bring Back Licensing, June 22 p 23
Population Explosion - Industrial Robot Style, by K. W. Bennett, May 25 p 67
Use Middle Managers to Key on Profits, by K. W. Bennett, Apr 13 p 53

Martin Co.:
Lots of BAD Ideas Make Cost-Saving Good, by P. J. Cathey, Mar 9 p 44

L. E. Mason Co.:
Does Your Company Keep its Know-How Secret? Wise Up, Jan 20 p 14

Massachusetts Institute of Technology
Stop the World? Not Just Yet! by Gene Beaudet, Mar 23 p 5

Materials
Aerospace Alloys March into New Markets, by D. C. Perry and R. R. Irving, Jan 13 p 49
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52
The B-1: A New Approach to Building Planes, by W. G. Patton, June 15 p 59
F-14 Puts Advanced Technology to the Test, by R. R. Irving, June 15 p 55
New Tools from New Materials, by J. E. Sandford, Apr 13 p 59
President Says 'Blast Off' for Space Shuttle, by A. M. Greene, Jan 13 p 45
Sail Speed Meter Poses Interesting Materials Problems, Jan 13 p 29
Tooling Materials Push Lathe Limits, by R. A. Wilson, Mar 9 p 38

Materials Handling
Hot Coil Handling Cut by One-Third, Mar 9 p 55
Materials Handling is in an Uplift, by K. W. Bennett, Apr 20 p 72
Materials Handling to Outdo NC on Machine Tools? by J. E. Sandford, June 1 p 41
Old Crane Steps Aside for Straddle Carrier, by B. D. Wakefield, Mar 30 p 67
Population Explosion - Industrial Robot Style, by K. W. Bennett, May 25 p 67
Those Wonderful Men and Their Amplifying Machines, by J. M. Beattie, May 25 p 67

Materials Handling Institute
Spend Now or Miss the Boat? by G. J. McManus, Apr 6 p 44

Maxhutte (West Germany)
See: Eisenwerk-Gesellschaft-Maxmillianshutte, m.b.h.

Maysteel Products Corp.:
Another Safety Problem Rears its Head, by B. D. Wakefield, Apr 6 p 59

Mazda Motors of America, Inc.:
Wankel Barbs are Competitor Sour Grapes, Says Mazda, by D. N. Williams, June 22 p 21

Meetings and Conventions
Annual Meetings are Not Always Sleepy Affairs . . ., by J. M. Beattie, May 4 p 69
Design Show Will Concentrate on Promising New Technologies, Apr 27 p 64
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87
New Products Boost Machine Builders, by R. A. Wilson, June 29 p 65
1976: A Brotherly Shove Needed? by J. M. Beattie, Jan 20 p 26
1972 Meetings and Conventions, Jan 6 p 143
1972 Welding Show Opens in Detroit, Mar 30 p 68
SME Conference Stresses Computers, Apr 13 p 69

Meetings and Exhibits—Dates, Locations and Sponsors for Up-Coming Conferences, Meetings and Shows

Mellon National Bank & Trust Co.:
Industries' Latest Problem-Profits, by G. J. McManus, Mar 30 p 45

Memory Devices
Programmed Controls Sparks New Era in Detroit, by J. E. Sandford, Feb 10 p 81

Metal Forge Co.:
Cold Forming Occupies a Hot New Turf, by R. A. Wilson, May 11 p 52

Metal Improvement Co.:
Shot Peening Extends Fatigue Life of Tractor Parts, by B. D. Wakefield, May 18 p 57

Metalcut Manufacturing, Inc.:
Carbide Saw Gives U.S. an Import Blocker, by B. D. Wakefield, Apr 13 p 65

Metallic Hydrogen
Is it a Metal? Is it a Gas? Yes-it's Supersomething, by K. W. Bennett, Jan 13 p 43

Metallurgy
Aerospace Alloys March into New Markets, by D. C. Perry and R. R. Irving, Jan 13 p 49
ESR Outperforms VAR in Making Superalloys, by T. C. DuMond, May 11 p 49
Fine Grain Super Tool Steels Make Fine Grinding Easier, Aug 20 p 90
Is it a Metal? Is it a Gas? Yes-it's Supersomething,' by K. W. Bennett, Jan 13 p 43
Metal Failures Signalled by Electrons, Apr 6 p 27
New-Tools from New Materials, by J. E. Sandford, Apr 13 p 59
Process Factors Equip Steel for Arctic Service, Mar 2 p 47
Solid State Bonding Joins Similar, Dissimilar Metals, Feb 24 p 28
A Third Coated Steel is Ready to Roll, by R. R. Irving, June 1 p 52

Metalmasters, Inc.:
Make Your Heat Treating Furnace Hotter, by B. D. Wakefield, Apr 27 p 58

Metalworking Industry
The Best is Yet to Come, by Gene Beaudet, June 22 p 43
If I Had a Million, by Gene Beaudet, May 25 p 5
Inventories: Recovery's Missing Link, by K. A. Kaufman, G. J. McManus and R. A. Wilson, June 8 p 44
It'll be Great in 1990 if . . ., by P. J. Cathey, Feb 17 p 44
January Thaw Hits Metalworking Orders, by K. W. Bennett, Jan 27 p 46
Metals Price Hikes Blow Economic Cool of Administration, by K. A. Kaufman, Mar 23 p 41
Recovery '71: Metalworking Ratios Say No, by J. D. Baxter, June 15 p 46
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Too Much Month Left at the End of the Money, by R. A. Wilson, Feb 17 p 40

Metalworking Labor—Weekly Report of Industrial Relations, Wages and Union Activities

Metalworking Newsfront—Capsule Digests of News Items Covering Steel, Nonferrous Metals and Related Industries

Methode Electronics, Inc.:
The Dawning of a New Age of Electronics? by K. W. Bennett, Feb 3 p 40

Metlab Co.:
Nitrided Gears Set Record for Size, Case Depth, May 18 p 61

Michigan State University
Restless Fast-Track Men are Entering Too Many Races, by P. J. Cathey, Apr 27 p 25

Midland-Ross Corp.:
Direct Reduction is Not Dead, by G. J. McManus, Feb 10 p 70

Midwest Chrome Process Co.:
New Coating Helps Carbon Steel Outperform Stainless, June 15 p 25

Miehle-Goss-Dexter Americas Co.:
U.S. Manufacturers Out for Blood in Export Game? by K. W. Bennett, Mar 9 p 36

Milwaukee Boiler Mfg. Co.:
A Light Appears at the End of Tunneling Market, by K. W. Bennett, June 29 p 66

Minerals
The Exhausting Problems of Resources, by K. A. Kaufman and James Beizer, Apr 20 p 70

Mining Industry
Australia Shakes Off Role as "Quarry for the World", by James Beizer, Apr 6 p 77
Coal's Future: Dig We Must, but Dig We Can't, by R. A. Wilson, May 18 p 45
Copper Comes a Cropper in Arizona Smelter Case, by James Beizer, Jan 27 p 48
The Exhausting Problems of Resources, by K. A. Kaufman and James Beizer, Apr 20 p 70
New Line on Silver: It isn't So Clouded, by James Beizer, June 22 p 65
Ore Men Iron Out Their Problems, by R. A. Wilson, Apr 13 p 46
Will Mining Come Out of the Dark with a Truth Squad? by James Beizer, Jan 27 p 69
Working May be Hazardous to Your Health, by D. N. Williams, Jan 20 p 22

Minority Enterprises Small Business Investment Corp.:
Black Capitalism: Does it Really Work? by Samuel Pressley, June 15 p 50

Minster Machine Co.:
Who Said this Industry is De-Pressed? by K. W. Bennett, June 22 p 40

Modicon Corp.:
Programmed Controls Spark New Detroit Era, by J. E. Sandford, Feb 10 p 81

Molybdenum Corp. of America
Process Factors Equip Steel for Arctic Service, Mar 2 p 47

Monarch Machine Tool Co.:
The New Technology in Low Cost NC, by J. E. Sandford, June 1 p 48

Moog, Inc.:
The New Technology in Low Cost NC, by J. E. Sandford, June 1 p 48

Morgan Guaranty Trust Co.:
Fill the Management Void in R &D Planning, by S. H. Hockenberry, Mar 23 p 48

Motch & Merryweather Machinery Co.:
NEP, Devaluation Speed Pinto Engine Naturalization, by D. N. Williams, Jan 20 p 27
Too Much Month Left at the End of the Money, by R. A. Wilson, Feb 17 p 40

Motorola, Inc.:
Is Licensing in Danger from Exports? by K. W. Bennett, Mar 16 p 60
It's Prime Time for Consumer Electronics, by K. W. Bennett, June 22 p 35
Teachers Working and Learning-in Industry? Jan 27 p 27

Mt. Vernon Die Casting Corp.:
Does Your Company Keep its Know-How Secret? Wise Up, Jan 20 p 14

Mowers
See also: Lawn Mowers

Murray Ohio Mfg. Co.:
Mowers Cash in on 'Greening' in America, by K. W. Bennett, June 8 p 48

N

NMB Corp.:
Japanese Bearings—All the Way from Chatsworth, Calif. by James Beizer, June 29 p 67

NVF Co.:
New BOF Vessel is Convertible to Bottom Blowing, June 29 p 33

Ralph Nader
Nader Comes up with Another Taxing Problem, by K. A. Kaufman, May 18 p 21
Working May be Hazardous to Your Health, by D. N. Williams, Jan 20 p 22

National Academy of Sciences
Emissions: An Exhausting Game of Politics, by D. N. Williams, Apr 13 p 23

National-Acme Co.:
Machine Tool Market: Going, Going . . ., by Gene Beaudet and R. A. Wilson, Mar 30 p 50

National Aeronautics & Space Administration
Data Banks Serve Industry's Need to Know, by A. M. Greene, Apr 6 p 57
ERTS: Resource Hunter from Outer Space, by C. J. Suchocki, June 29 p 29
President Says 'Blast Off' for Space Shuttle, by A. M. Greene, Jan 13 p 45
Technology Transfer Helps People and Products, Jan 13 p 56

National Alliance of Businessmen
NAB II: A New Look in Hard-Core Training, June 8 p 23

National Assn. of Metal Finishers
Aluminum, Copper, Cadium-Talk About Prices, Dumping, by James Beizer, May 25 p 71

National Assn. of Purchasing Management
Durables Catalogs Low: Time to Stock Up? by J. D. Baxter, Jan 13 p 42
Hidden Dangers Lurk in Buyer's Market, Says P. A. Chief, by G. J. McManus, Apr 6 p 45
Industrial Buyers 'Policing' Price Moves, by G. J. McManus, Jan 20 p 24
Inventories: Recovery's Missing Link, by K. A. Kaufman, G. J. McManus and R. A. Wilson, June 8 p 44

National Assn. of Secondary Materials Industries
Getting Tax Breaks for Trashy Products? June 8 p 51
Will Metals' Recycling Need a Social Price Tag? by J. J. Obrzut, Jan 27 p 54

National Broach & Machine Div.:
Pot Broach Doubles Part Production, June 29 p 81

National Coil Coaters Assn.:
Coil Coaters Back on Growth Curve, But See No Technical Breakthrough for Year, by B. D. Wakefield and K. W. Bennett, Feb 3 p 56
Coil Coaters Paint a Rosy Picture, May 18 p 44
Ford Has Coating it Thinks Will Lick Corrosion, May 11 p 56

National Commission on Materials Policy
The Exhausting Problems of Resources, by K. A. Kaufman and James Beizer, Apr 20 p 70

National Extruded Metal Products Co.:
Cold Forming Occupies a Hot New Turf, by R. A. Wilson, May 11 p 52

National Forge Co.:
Computer Moves Data, Not Paper, Feb 3 p 54

National Industrial Conference Board
SEE: Conference Board

National Institute of Occupational Safety and Health
Working May be Hazardous to Your Health, by D. N. Williams, Jan 20 p 22

National Labor Relations Board
Court Pulls Plug on NLRB's Successor Powers, May 25 p 23

National Machine Tool Builders Assn.:
Election Year '72 Forming as Profit Year for Tool Builders, by R. A. Wilson, Jan 6 p 86
Machine Builders: Again, Hopeful Hearts, by R. A. Wilson, Mar 2 p 38
Machine Tools: Caveat Gets Empted, by R. A. Wilson, May 11 p 40
New Products Boost Machine Builders, by R. A. Wilson, June 29 p 65
OSHA Press Rules-Fuss, but Few Orders, by R. A. Wilson, May 25 p 73
Tool Builders Tap Pent-Up Demand, by R. A. Wilson, Feb 3 p 44
Value Engineering Brings CNC into Focus, by R. A. Wilson, May 25 p 81

National Machinery Co.:
Cold Forming Occupies a Hot New Turf, by R. A. Wilson, May 11 p 52

National Paint & Coatings Assn.:
Coatings Give Plastics Raft of New Traits, by J. J. Obrzut, Mar 16 p 71

National Standard Co.:
Wiremen Eye New Mills and Materials, by B. D. Wakefield, May 4 p 79

National Steel and Shipbuilding Co.:
Steel Summary: A Lot Rides on New Ships, Jan 20 p 45

National Steel Corp.:
Canmaking's New Battleground: The D & I Process, by G. J. McManus, June 29 p 68
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Steel Summary: 'Grand Tour' of Technology, by G. J. McManus, June 15 p 71
Steel's Iron Mine Can be the City Dump, by G. J. McManus, Mar 23 p 57

National Tool, Die and Precision Machining Assn.:
Iron Curtain Creaks Open for Tool, Die Work, by K. A. Kaufman, June 22 p 39
No Chance for Job Shop Price Exemption Approval, by K. A. Kaufman, Apr 6 p 43
Tool and Die: Starting on the Road Back, by R. A. Wilson, Jan 27 p 50

Natural Gas
Dual-Fuel Burner Adapts to Fuel Shortages, Mar 16 p 78
Thinking Energy is "No Fault" at GM, by D. N. Williams, Jan 27 p 23

Negroes
See Also: Sociology
Industrial Relations
Economics
Black Capitalism: Does it Really Work? by Samuel Pressley, June 15 p 50

New Equipment—Weekly Array of Latest Models and Accessories

Newark College of Engineering
Tomorrow's New Products, Today, by the Hunch Bunch, by K. W. Bennett, May 18 p 49

Newport News Shipbuilding and Dry Dock Co.:
Newport News Gives X-Ray Top Priority, Jan 20 p 34

Niagara Machine and Tool Works
OSHA Press Rules-Fuss, but Few Orders, by R. A. Wilson, May 25 p 73

Nicholson File Co.:
Unraveling the Porter-Disston-Nicholson Caper, by G. J. McManus, Apr 13 p 47

Nickel
Discount Malady Overcomes Nickel Prices, by James Beizer, Mar 9 p 69
Nickel Orders on the Way Up. Prices, Too? by James Beizer, Jan 6 p 165

Niobium Alloys
Users Strike Gold in Ucon, May 4 p 29

Nippon Kokan
U. S. Steel Men Intrigued by Japan's Huge Blast Furnace, by G. J. McManus, May 18 p 59

Nippon Miniature Bearings Co., Ltd.:
Japanese Bearings—All the Way from Chatsworth, Calif.? by James Beizer, June 29 p 67

Nissan Motor Corp.:
Auto Imports: Less Worrying and Buy U.S., by D. N. Williams, and James Beizer, Apr 6 p 41

Nitriding
Nitrided Gears Set Record for Size, Case Depth, May 18 p 61

Noise
EPA Powers-Up for War on Noise, Mar 9 p 25
Nylon Gears Reduce In-Plant Noise, Mar 9 p 53
Pinpoint Noise Problems at a Glance, by B. D. Wakefield, Mar 16 p 74

Nondestructive Testing
NDT Methods Get Attention of Automotive Men, Jan 27 p 61
NDT: Process Control or Legal Defense? by B. D. Wakefield, Jan 27 p 60
Newport News Gives X-Ray Top Priority, Jan 20 p 34

Nonferrous Industry
Aluminum, Copper, Cadium-Talk About Prices, Dumping, by James Beizer, May 25 p 71
Anaconda's Future Profits Out of Place? by James Beizer, Mar 30 p 55
Brass Mills Took Turn for the Worst in 1971, by James Beizer, Feb 24 p 75
Copper Waits, and Waits, and Waits for a Better Economy, by James Beizer, Feb 3 p 71
Everybody Has to Lose Arizona Copper Case, by James Beizer, Jan 13 p 37
New Line on Silver: It isn't So Clouded, by James Beizer, June 22 p 65
Nonferrous Chiefs See Improvement in Business Outlook, by James Beizer, May 11 p 73
Nonferrous Earnings Plunge to Lowest Level in Years in Sluggish Economy, by James Beizer, Apr 27 p 45
Nonferrous '71: Crying All the Way to the Bank, by James Beizer, Feb 17 p 45
Nonferrous Shakes Doldrums in First Quarter, by James Beizer, May 4 p 111
Pollution: Trade-off under Protest, by James Beizer, Feb 10 p 68
What are the Price Prospects for Copper, Lead, Zinc? by James Beizer, June 29 p 109
When First Quarter Earnings are Like Democratic Primaries, by James Beizer, Apr 27 p 71

Nonferrous Markets — Weekly Reports Including Prices (See Also James Beizer)

Nonferrous Metals
Annual Statistical Review—Metal Prices and Production as of January 6, 1972, Jan 6 p 113
Brass Mill, Aluminum Semi-Fab Prices Up, Jan 16 p 13
The Exhausting Problems of Resources, by K. A. Kaufman and James Beizer, Apr 20 p 70

Noranda Sales Corp.:
Zinc: My 'Bounty' Lies Over the Ocean? by James Beizer, Apr 13 p 48

Nordberg Div.:
Is it Metal? Is is Gas? Yes-it's Supersomething, by K. W. Bennett, Jan 13 p 43

Norden Div.:
Managers Arise to Defend Technology from the Wolves, by P. J. Cathey, Apr 20 p 27

C. A. Norgren Co.:
Four-Day Week Needs Game Plan for Success, by C. J. Suchocki, Mar 16 p 65
Is Licensing in Danger from Exports? by K. W. Bennett, Mar 16 p 60

North American Rockwell Corp.:
The B-1: A New Approach to Building Planes, by W. G. Patton, June 15 p 59
Defense Budget Needed Rx for Wheezing Aerospace, by G. J. McManus, Feb 3 p 43
Joining Processes Tackle Titanium for Aircraft Parts, June 8 p 31
NR Works to Adapt Space Lore, by T. C. DuMond, Jan 13 p 55
President Says 'Blast Off' for Space Shuttle, by A. M. Greene, Jan 13 p 45
The Search for America, Inc., by G. J. McManus, Jan 6 p 95

Northwestern Steel & Wire Co.:
Steel Summary: Shootout on the Price Front, Jan 13 p 63

Norton Co.:
Bearings Seek Economy in New Methods, by T. C. DuMond, Apr 27 p 51
Ceramics Begin to Answer Industry's Burning Questions, by A. M. Greene, June 22 p 48
Warner & Swasey Veers Back to Machine Tools, Jan 6 p 13

Nuclear Power
Is is a Metal? Is it a Gas? Yes-it's Supersomething, by K. W. Bennett, Jan 13 p 43
Nuclear Equipment: Oh those Shipments! by J. M. Beattie, Mar 23 p 42
Seaborne Power Plant Ready for Launching, Feb 24 p 25
There is No "Energy Crisis", But . . ., by B. D. Wakefield, Mar 9 p 49
When Energy Crunch Crunches, by J. M. Beattie and P. J. Cathey, Apr 27 p 40

Numerical Control
An 'Impossible' Part Meets NC Tape, Jan 20 p 37
DNC: The Agony of Being First, Mar 30 p 45
Finished Dimensions Govern Tube Bending, May 18 p 55
Increasing Output is Job for Machines,-Not People, by J. E. Sandford, Feb 10 p 71
Low-Cost NC Closes the Loop, by J. E. Sandford, May 25 p 87
Magazine Holds 72 Tools for NC Punching, by B. D. Wakefield, Jan 20 p 38
Materials Handling to Outdo NC on Machine Tools? by J. E. Sandford, June 1 p 41
Navy Buys First U. S. Built NC Nibbler, by B. D. Wakefield, Apr 20 p 94
The New Technology in Low Cost NC, by J. E. Sandford, June 1 p 48
Value Engineering Brings CNC into Focus, by R. A. Wilson, May 25 p 81

Nylon
Nylon Gears Reduce In-Plant Noise, Mar 9 p 53

O

Oak Electro/Netics Corp.:
The Dawning of a New Age of Electronics? by K. W. Bennett, Feb 3 p 40

Occupational Safety and Health Act
See: Safety Health Programs

Office Equipment
Profit-Eating File Cabinets Must be Made to Heel, Apr 13 p 27

Office of Management and Budget
'Product Quality' is Buyer's Concern, Says OMB Official, by K. A. Kaufman, Apr 6 p 21

Oglebay Norton Co.:
Ore Men Iron Out Their Problems, by R. A. Wilson, Apr 13 p 46

Ohio State University
NDT Methods Get Attention of Automotive Men, Jan 27 p 61

O'Neal Steel Inc.:
January Thaw Hits Metalworking Orders, by K. W. Bennett, Jan 27 p 46

Opportunities Industrialization Center
Black Capitalism: Does it Really Work? by Samuel Pressley, June 15 p 50

H. Gary Osbon
NR Works to Adapt Space Lore, by T. C. DuMond, Jan 13 p 55

Osborn Mfg. Co.:
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87

Otis Material Handling Div.:
Materials Handling is in an Uplift, by K. W. Bennett, Apr 20 p 72

Outboard Marine Corp.:
Mowers Cash in on 'Greening' in America, by K. W. Bennett, June 8 p 48

Outdoor Power and Equipment Institute
Mowers Cash in on 'Greening' in America, by K. W. Bennett, June 8 p 48

Owatonna Tool Co.:
Swedish Drill Fills Gap in U. S. Market, by B. D. Wakefield, Feb 24 p 62

Oxygen
Coming Soon: French LWS Process for Steelmaking, by G. J. McManus, June 29 p 80
New BOF Vessel is Convertible to Bottom Blowing, June 29 p 33
New Oxygen Process Blowing Across the Ocean to U.S.? Mar 30 p 25
Probe Senses Oxygen in Molten Copper, Mar 30 p 66

P

PPG Industries
Multinationals: Labor Makes War! by J. D. Baxter, Jan 27 p 45

Pacific Maritime Assn.:
Will Dock Strike Trigger Reform Law? Feb 10 p 66

Pangborn Div.:
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87

Park-Ohio Industries
Cold Forming Occupies a Hot New Turf, by R. A. Wilson, May 11 p 52

Patent Management Inc.:
From Russia with Love—If You Have a License? by J. M. Beattie, June 22 p 38

Patents
From Russia with Love—If You Have a License? by J. M. Beattie, June 22 p 38

Pay Board
Abel Canes PB: Like Flogging a Dead Horse? Mar 9 p 19
Aero Veto: Harbinger of the Hardline? Jan 13 p 21
And Now, the Politics of Matzoh Balls! Apr 6 p 43
Burns Assures Economy of Fed Feed, by K. A. Kaufman, Feb 17 p 46
Don't Sell Phase II Short, Asks USWA's Abel, by G. J. McManus, Feb 3 p 45
Every Manager Can Learn to Live with Phase II, Feb 10 p 29
IAM: PB Spins $53 Million Windfall to Employers, Apr 13 p 19
Just for Once, This Would be Great! by Gene Beaudet, May 11 p 5
Labor '72: Planning Bumps Demanding, by C. J. Suchocki, Jan 13 p 40
PB Tackles Shifting Merit Raises —Again, Apr 20 p 19
Pay Board: Another Game of 'Catch', Feb 3 p 19
Pay Board Defrosts Back Pay, Jan 20 p 11
Pay Board: Ruling Against the Rulemaker? Feb 17 p 19
Pay Board Turns Down Screws on Deferred Wages, June 15 p 19
Pay Board Works Out the Fringes, Mar 2 p 19

Bruce Payne & Associates
Want Price Rise? How's Your Productivity Rate? by J. D. Baxter, Feb 10 p 74

Peabody Coal Co.:
Kennecott's Top Men on Supply, Price, Pollution, by James Beizer, Jan 20 p 29

Pellets
Control Pollution Without Capital Outlay, by J. J. Obrzut, Mar 2 p 48

Peltzer & Ehlers (West Germany)
Cold Former from Germany Makes U.S. Debut, by R. A. Wilson, June 22 p 54

Penn Central Transportation Co.:
Beware Liability Rabbit-Punch—it's Deadly, May 11 p 44

Pennsylvania Engineering Corp.:
New Oxygen Process Blowing Across the Ocean to U.S.? Mar 30 p 25

Pensions
Pension Bill: Going Back into Retirement? by K. A. Kaufman, May 18 p 43

Penwalt Corp.:
Can't Cut Hard Material? "Blast" it Away, Apr 13 p 63

Peru
New Expropriation Rules are Pay or Get Cut Off, by K. A. Kaufman, Jan 27 p 21

Peter G. Peterson
Needed: All-Out Strategy for U. S. Growth, by K. A. Kaufman, May 4 p 73

Petroleum Industry
Gas Ruling Drains FTC Power Drive, by K. A. Kaufman, Apr 13 p 21
Gas War—or How to Keep the Lead In, by C. J. Suchocki, May 18 p 25

Phelps Dodge Corp.:
Copper Comes a Cropper in Arizona Smelter Case, by James Beizer, Jan 27 p 48
Copper Gains a Little More Breathing Room, by James Beizer, June 1 p 27
Everybody Has to Lose Arizona Copper Case, by James Beizer, Jan 13 p 37
A Fresh Look at the Environment, by Gene Beaudet, Jan 13 p 5
It's Price Change Time—and Phelps Dodge Does it Again, by James Beizer, Mar 2 p 65
Nonferrous Chiefs See Improvement in Business Outlook, by James Beizer, May 11 p 73
Phelps Dodge Stages New Western Smelter, by James Beizer, Mar 16 p 56
Taking the Spaghetti-Making Out of Copper, by J. M. Beattie, June 1 p 67

Philadelphia
1976: A Brotherly Shove Needed? by J. M. Beattie, Jan 20 p 26

Philadelphia Building and Construction Trades Council
Building Trades: 'God Bless America' and Kill the Scabs, June 29 p 23

Philadelphia Gear Corp.:
Nitrided Gears Set Record for Size, Case Depth, May 18 p 61

Philco-Ford Corp.:
Fluxless Brazing Goes High Production, by R. A. Wilson, Apr 27 p 56

Photon Sources
Laser Blasts 7200 Holes Each Minute, Feb 24 p 67

Pickling
Glass Beads Guard Rolls During Pickling, Feb 24 p 64

Pielet Bros. Scrap Iron & Metal Co.:
Cryogenics is Not a Fragment of Scrap's Imagination, by K. W. Bennett, May 18 p 47

Pioneer-Standard Electronics, Inc.:
The Dawning of a New Age of Electronics? by K. W. Bennett, Feb 3 p 40

Pipe
Ryerson Rides Big Plastic Pipe into Pollution Market, by K. W. Bennett, May 11 p 37

Pipelines
Is There a Better Way to Build Pipelines? by B. D. Wakefield, Mar 2 p 46
Military Pipelines Can be Made in the Field, Apr 13 p 29
Process Factors Equip Steel for Arctic Service, Mar 2 p 47

Pittsburgh Corning Corp.:
Glass Beads Guard Rolls During Pickling, Feb 24 p 64

Pittsburgh National Bank
Too Much Month Left at the End of the Money, by R. A. Wilson, Feb 17 p 40

Plasma Technology
MHD: An Answer to Energy Crisis? Jan 27 p 25
Ocean Listed as Potential Source of Energy Fuel, Jan 6 p 28

Plastics
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52
Coatings Give Plastics Raft of New Traits, by J. J. Obrzut, Mar 16 p 71
Foam Plastic Aims at Metal Targets, Mar 16 p 31
Ford: Give Us Your Junk Cars, Your Old Foam . . ., by D. N. Williams, Apr 20 p 23
Plastics Add Twist to Recycling Equipment, by K. W. Bennett, June 15 p 47
Ryerson Rides Big Plastic Pipe into Pollution Market, by K. W. Bennett, May 11 p 37
Teflon Has a Knack for Solving Problems, by J. J. Obrzut, June 22 p 51

Pollution, Air
Aluminum Saves More Hot Air than Critics Generate? by James Beizer, June 15 p 73
Anaconda's Future Profits Out of Place? by James Beizer, Mar 30 p 55
Auto Emission Control: Suppliers Heyday? by D. N. Williams, Apr 13 p 45
Bethlehem-State Coke-Control Pact Bets on Tomorrow, by G. J. McManus, Mar 16 p 57
Better Breathing in Parma, Ohio! May 18 p 45
Buick Sparking Efforts to Meet Emission Laws, by D. N. Williams, Feb 10 p 25
Control Pollution Without Capital Outlay, by J. J. Obrzut, Mar 2 p 48
Copper Comes a Cropper in Arizona Smelter Case, by James Beizer, Jan 27 p 48

Copper Gains a Little More Breathing Room, by James Beizer, June 1 p 27
EPA: Shake Things Up and Worry Later, by G. J. McManus, Mar 2 p 36
Ecology Costs: The Price of Action Comes High, Jan 13 p 27
Emissions: An Exhausting Game of Politics, by D. N. Williams, Apr 13 p 23
Everybody Has to Lose Arizona Copper Case, by James Beizer, Jan 13 p 37
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87
A Fresh Look at the Environment, by Gene Beaudet, Jan 13 p 5
From Sweden: Ferroalloys without Air Pollution, by R. R. Irving, June 15 p 44
Gas War—or How to Keep the Lead In, by C. J. Suchocki, May 18 p 25
The Grand Old Party and the 'Copper Barons', by James Beizer, Feb 17 p 69
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77
The Helter-Skelter Smelter Case Keeps on Rollin' Along, by James Beizer, June 15 p 73
Late Rush Sets Standards' Pace for '72, Jan 13 p 27
MHD: An Answer to Energy Crisis? Jan 27 p 25
New Nodulizer Curbs Smoke, Fumes for Ductile Iron, Mar 2 p 50
Political Smoke Clouds Pollution Issue, by K. A. Kaufman, Feb 24 p 49
Pollution Hearings: Politics—2, Copper—1, by James Beizer, Mar 2 p 34
Pollution Problems? Rent-a-System, by G. J. McManus, June 8 p 50
Pollution: Trade-off under Protest, by James Beizer, Feb 10 p 68
The Problems with Having a Smelter as a Neighbor, by James Beizer, Jan 20 p 47
Roadmap for Exhaust Control Should List Six-Stop Trip, by D. N. Williams, Mar 23 p 23
Smog Control: 'I Shot a Laser into the Air . . .', Apr 20 p 25
Somewhere in All these Lemons there May be a Creampuff, by D. N. Williams, Jan 6 p 85
Steel Summary: Dynamic Era of Progress Dawning? Jan 6 p 163
Thinking Energy is "No Fault" at GM, by D. N. Williams, Jan 27 p 23

Pollution Systems Corp.:

Heat Pollution Drive Hits the Coke Oven, by G. L. McManus, June 29 p 77

Pollution, Water

City Pollution Backlashes on Capito(a)l, by K. W. Bennett, June 1 p 38
Closed Loop System Turns Waste Water Back into Oil, Mar 9 p 55
Ecology Costs: The Price of Action Comes High, Jan 13 p 27
A Fresh Look at the Environment, by Gene Beaudet, Jan 13 p 5
Late Rush Sets Standards' Pace for '72, Jan 13 p 27
Nixon-Industry Combo Fail to Dent New Pollution Law, by K. A. Kaufman, Mar 23 p 21
Pollution Control: Rinse Out a Profit, by R. A. Wilson, Feb 17 p 48
Ruling Revives State Standard's Debate, Jan 27 p 25
Ryerson Rides Big Plastic Pipe into Pollution Market, by K. W. Bennett, May 11 p 37
Water Filters: High-Rate Clean-Up: Low-Cost Tab, by C. J. Suchocki, June 29 p 29
Water, Water Everywhere—Even Some to Drink, by K. W. Bennett, June 15 p 43

Polymer Corp.:

Nylon Gears Reduce In-Plant Noise, Mar 9 p 53

H. K. Porter Co.:

Unraveling the Porter-Disston-Nicholson Caper, by G. J. McManus, Apr 13 p 47

Powder Coatings

Powder Coating Line Scores Hit First Time, by J. J. Obrzut, May 4 p 84

Powdered Metals

Bearings Seek Economy in New Methods, by T. C. DuMond, Apr 27 p 51
Cold Forming Occupies a Hot New Turf, by R. A. Wilson, May 11 p 52
GM Turns Scrap Turnings into PM Parts, by D. N. Williams, Feb 24 p 65

Precision Instrument Mfg. Co.:

Phosphate Coating Solves Problems in Bolt Tightening, June 22 p 27

Pre Finish Metals, Inc.:

Coil Coaters Back on Growth Curve, But See No Technical Breakthroughs for Year, by B. D. Wakefield and K. W. Bennett, Feb 3 p 56
There is No "Energy Crisis", But . . ., by B. D. Wakefield, Mar 9 p 49

Press Brake Forming

See: Presses

Press Brakes

Press Stops When Arm Breaks Light Beam, Feb 10 p 85

Presses

How Costly is Meeting OSHA's Rules on Presses? May 25 p 73
Multiple Linkage Press Drives Looking Up, by B. D. Wakefield, May 18 p 62
Press Brake Forming Can be Fast and Safe, by B. D. Wakefield, May 18 p 60
TRW Seeks Answer to Cost Squeeze in World's Largest Mechanical Forging Press, by R. A. Wilson, Feb 17 p 56
Who Said this Industry is De-Pressed? by K. W. Bennett, June 22 p 40

Price Commission

Adminisration Says Profits Show Price-Control Breakdown, by K. A. Kaufman, Apr 20 p 21
And Now, the Politics of Matzoh Balls! Apr 6 p 43
Burns Assures Economy of Fed Feed, by K. A. Kaufman, Feb 17 p 46
Every Manager Can Learn to Live with Phase II, Feb 10 p 29
How Much Capacity is Really Useable? by R. A. Wilson, June 15 p 48
How to Win Friends and Influence Buyers? by G. J. McManus, Apr 20 p 73
Industrial Buyers 'Policing' Price Moves, by G. J. McManus, Jan 20 p 24
Industries' Latest Problem — Profits, by G. J. McManus, Mar 30 p 45
Just for Once, This Would be Great! by Gene Beaudet, May 11 p 5
Meany Uses Price Panel to Grind Labor's Axe, Apr 6 p 19
Metals Price Hikes Blow Economic Cool of Administration, by K. A. Kaufman, Mar 23 p 41
No Chance for Job Shop Price Exemption Approval, by K. A. Kaufman, Apr 6 p 43
Price Commission Cracking Down on Price Boosts, by K. A. Kaufman, Apr 27 p 19
Productivity Means Keeping Up with Jones', by K. A. Kaufman, Mar 30 p 47
Spare a Thought for the Archie Bunkers . . ., by J. M. Beattie, May 11 p 35
Want Price Rise? How's Your Productivity Rate? by J. D. Baxter, Feb 10 p 74
Zinc: My 'Bounty' Lies Over the Ocean? by James Beizer, Apr 13 p 48
Zinc Revives Old Refrain on Price Controls, by James Beizer, Mar 23 p 45

Prices—Steel Industry's Most Up-To-Date Weekly Tabulation of Prices for All Forms of Steel from Scrap to Strip

Prices

Aluminum, Copper, Cadmium-Talk About Prices, Dumping, by James Beizer, May 24 p 71
Aluminum, Stainless Prices: Going Down the Up Stairs, by James Beizer, May 11 p 41
Annual Statistical Review—Metal Prices and Production as of January 6, 1972, Jan 6 p 113
Asarco Feels the Teeth of Price Controls, by James Beizer, Apr 20 p 125
Asarco Leads Lead Price Increase, by James Beizer, Feb 10 p 121
Brass Mill, Aluminum Semi-Fab Prices Up, Jan 6 p 13
Discount Malady Overcomes Nickel Prices, by James Beizer, Mar 9 p 69
Downward Price Pressure Sets in as Market Softens, June 1 p 68
How to Win Friends and Influence Buyers? by G. J. McManus, Apr 20 p 73
Industrial Buyers 'Policing' Price Moves, by G. J. McManus, Jan 20 p 24
It's Price Change Time—and Phelps Dodge Does it Again, by James Beizer, Mar 2 p 65
Kaiser Trying for Better Prices on Aluminum, by James Beizer, Mar 16 p 123
London's Copper Price Pendulum Gives U.S. Producers the Jitters, by James Beizer, June 8 p 79
Market Celebrates the New Year with Price Gains, Jan 6 p 166
Metals Price Hikes Blow Economic Cool of Administration, by K. A. Kaufman, Mar 23 p 41
Nickel Orders on the Way Up. Prices, Too? by James Beizer, Jan 6 p 165
Price Boosts on Cadmium Led by Bunker Hill, by James Beizer, Mar 16 p 123
Price Commission Cracking Down on Price Boosts, by K. A. Kaufman, Apr 27 p 19
Prices Hold as Mid-Month Doldrum Grips Market, Mar 23 p 72
The Silver Industry Takes Another Stab at Price Predicting, by James Beizer, Feb 10 p 121
Steel Summary: Shootout on the Price Front, Jan 13 p 63
Steel's Profits Go Overseas, by G. J. McManus, Feb 3 p 42
Want Price Rise? How's Your Productivity Rate? by J. D. Baxter, Feb 10 p 74
What are the Price Prospects for Copper, Lead, Zinc? by James Beizer, June 20 p 109
Will Scrap Join the Phase II Price Parade? Feb 3 p 72
Zinc: My 'Bounty' Lies Over the Ocean? by James Beizer, Apr 13 p 48
Zinc Revives Old Refrain on Price Controls, by James Beizer, Mar 23 p 45

Production

The B-1: A New Approach to Building Planes, by W. G. Patton, June 15 p 59
Farm Area's New Crop—Factories, by K. W. Bennett, Feb 10 p 65
GM Plants Seeds to Develop CAM Machinery, by J. E. Sandford, Feb 24 p 53
GM Wankel Tooling Grinds to a Start, by D. N. Williams, June 1 p 36
Get it Together with Automatic Assembly, by R. A. Wilson, June 29 p 82
Lordstown Shootout: Cost-Cutters vs. New Labor, by D. N. Williams and R. A. Wilson, Feb 3 p 38
Producivity Begins at Home, by Gene Beaudet, Mar 30 p 5
Productivity: Like Motherhood, But—, by P. J. Cathey, June 1 p 39
Productivity Means Keeping Up with Jones', by K. A. Kaufman, Mar 30 p 47
The Puzzle of Productivity, by G. J. McManus and J. M. Beattie, Mar 9 p 40
U.S. Manufacturing: 10, 9, 8, 7, 6, 5, 4, 3, 2 . . . ? by G. J. McManus, May 25 p 69
Utilization: More May Not be Better, by G. J. McManus, Apr 27 p 39
Want Price Rise? How's Your Productivity Rate? by J. D. Baxter, Feb 10 p 74
Will '72 be Year of the Manufacturing Manager? Jan 6 p 27

Programmable Controllers

Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50
Programmed Controls Spark New Detroit Era, by J. E. Sandford, Feb 10 p 81

Progress Aerospace Enterprises, Inc.:

Black Capitalism: Does it Really Work? by Samuel Pressley, June 15 p 50

Puget Sound Air Pollution Control Agency

The Problems with Having a Smelter as a Neighbor, by James Beizer, Jan 20 p 47

Pullman, Inc.:

The Search for America, Inc., by G. J. McManus, Jan 6 p 95

Punching

Magazine Holds 72 Tools for NC Punching, by B. D. Wakefield, Jan 20 p 38

Purchasing

Are Odds in Favor of GE Winning Antitrust Suit? by K. A. Kaufman, May 25 p 25
Buyers Now Seek Service, Not Inventories, by G. J. McManus, Feb 24 p 47
Durables Catalogs Low: Time to Stock Up? by J. D. Baxter, Jan 13 p 42
Every Manager Can Learn to Live with Phase II, Feb 10 p 29
Hidden Dangers Lurk in Buyer's Market, Says P. A. Chief, by G. J. McManus, Apr 6 p 45
Industrial Buyers 'Policing' Price Moves, by G. J. McManus, Jan 20 p 24
Inventories: Recovery's Missing Link, by K. A. Kaufman, G. J. McManus and R. A. Wilson, June 8 p 44
January Thaw Hits Metalworking Orders, by K. W. Bennett, Jan 27 p 46
Justifying New Machinery: It's Not So Tough, by K. W. Bennett, Feb 24 p 56
1972: "This May Sound Crazy, But . . .," by Gene Beaudet, Jan 6 p 83
SSCI Orders Indicate Recovery Continues, by Gene Beaudet, May 18 p 48
Steel Summary: It Has Been a Week of UPs, Feb 10 p 119

Quality Control

Lots of BAD Ideas Make Cost-Saving Good, by P. J. Cathey, Mar 9 p 44

R

RLK Research, Inc.:
Redesign in Carbide Guides Doubles Life of Honing Stones, by W. G. Patton, Jan 20 p 36

Racing Cars
Racing's Triple Crown: Technology vs Mechanics, by H. M. Nelson, June 29 p 71

Radio Corp. of America
The Dawning of a New Age of Electronics? by K. W. Bennett, Feb 3 p 40
The Search for America, Inc., by G. J. McManus, Jan 6 p 95

Railroads
A1 Transit Cars Given Textured Look by Scratch Brush, May 25 p 88
Federal Funds Accelerate Mass Transit, by T. C. DuMond, Mar 23 p 52
Hot Formed Railroad Wheels in Four Minutes, May 25 p 33
Rail Crisis Awakens Labor Reformers, Mar 23 p 19
Steel Can Rest Comfortably After Tank-Car Diagnosis, by C. J. Suchocki, May 25 p 72

Ransburg Electro-Coating Corp.:
U.S. Manufacturers Out for Blood in Export Game? by K. W. Bennett, Mar 9 p 36

Ransome Co.:
Positioners Take the Downtime Out of Welding, by R. R. Irving, Mar 30 p 60

Raymond Corp.:
Materials Handling is in an Uplift, by K. W. Bennett, Apr 20 p 72

Recruitment
First Step in Getting a Good Man —Sound Job Description, June 22 p 25
Will '72 be Year of the Manufacturing Manager? Jan 6 p 27

Redd Plastics Corp.:
Plastics Add Twist to Recycling Equipment, by K. W. Bennett, June 15 p 47

Rego Div.:
Use Middle Managers to Key on Profits, by K. W. Bennett, Apr 13 p 53

Reliance Electric Co.:
Programmed Controls Spark New Detroit Era, by J. E. Sandford, Feb 10 p 81
The State of Flux in Static Drives, by R. A. Wilson, Mar 2 p 43

Reliance Steel & Aluminum Co.:
Unlock Dollars Frozen in Inventories, by K. W. Bennett, Apr 20 p 67

Remington Arms Co.:
Bearings Seek Economy in New Methods, by T. C. DuMond, Apr 27 p 51

Renault Co.:
Cylinder Heads Die Cast at 40 per Hour, by Raymond Shah, May 18 p 58

Republic Steel Corp.:
Canmaking's New Battleground: The D & I Process, by G. J. McManus, June 29 p 68
Chicago Mill Ends Leaker Problem in Pouring Big Ingots, by B. D. Wakefield, Jan 27 p 61
Cold Forming Occupies a Hot New Turf, by R. A. Wilson, May 11 p 52
The State of Flux in Static Drives, by R. A. Wilson, Mar 2 p 43
Steel Summary: No Wild Cheers for Quota Pact, May 18 p 81
Steel Summary: Record Imports Hits Where it Hurts, Feb 3 p 69
Steel's Profits Go Overseas, by G. J. McManus, Feb 3 p 42

Rex Chainbelt, Inc.:
Industry Opens its Purse, by G. J. McManus, Mar 23 p 39
Is it a Metal? Is it a Gas? Yes—it's Supersomething, by K. W. Bennett, Jan 13 p 43

Reynolds Metals Co.:
Aluminum Resets its Sights on 10 Pct a Year Growth Rate, by James Beizer, Mar 23 p 71
Automakers Assign Top Priority to Weight, by W. G. Patton, Feb 17 p 52
Canmaking's New Battleground: The D & I Process, by G. J. McManus, June 29 p 68
Nonferrous Earnings Plunge to Lowest Level in Years in Sluggish Economy, by James Beizer, Apr 27 p 45
Nonferrous '71: Crying All the Way to the Bank, by James Beizer, Feb 17 p 45

Rhodesia
Annual Meetings are Not Always Sleepy Affairs . . ., by J. M. Beattie, May 4 p 69
Rhodesian Chrome: Don't Import, Import, Don't . . ., by K. A. Kaufman, June 1 p 23

Robbins Co.:
A Light Appears at the End of Tunneling Market, by K. W. Bennett, June 29 p 66

H. H. Robertson Co.:
The Search for America, Inc., by G. J. McManus, Jan 6 p 95

Robots
See: Materials Handling and Automation

Rockwell Mfg. Co.:
The Price Controls Squeeze Play? by K. A. Kaufman, K. W. Bennett and G. J. McManus, May 11 p 35

Rods
A New Era for Rod Mills: Build One or Get Out! by G. J. McManus, June 22 p 41
Wiremen Eye New Mills and Materials, by B. D. Wakefield, May 4 p 79

Rollei Camera Co.:
Plant Costs aren't Far Out in Far East, by J. D. Baxter May 25 p 76

Rolls
Glass Beads Guard Rolls During Pickling, Feb 24 p 64
New Rolls Last Longer in Furnace Service, Mar 9 p 56

Rolls Royce Ltd.:
Coatings Protect Costly Alloys During Treatment, Jan 27 p 29

Royal Bank of Canada
Sure He Heard You, but Still Put it in Writing, Mar 23 p 27

Rust Engineering Co.:
Inventories: Recovery's Missing Link, by K. A. Kaufman, G. J. McManus and R. A. Wilson, June 8 p 44
Pollution Problems? Rent-a-System, by G. J. McManus, June 8 p 50

Rustproofing and Metal Finishing Corp.:
Phosphate Coating Solves Problems in Bolt Tightening, June 22 p 27

Joseph T. Ryerson & Son, Inc.:
January Thaw Hits Metalworking Orders, by K. W. Bennett, Jan 27 p 46
Ryerson Rides Big Plastic Pipe into Pollution Market, by K. W. Bennett, May 11 p 37
U.S. Manufacturers Out for Blood in Export Game, by K. W. Bennett, Mar 9 p 36
Unlock Dollars Frozen in Inventories, by K. W. Bennett, Apr 20 p 67

S

S & M Constructors, Inc.:
A Light Appears at the End of Tunneling Market, by K. W. Bennett, June 29 p 66

SKF Industries, Inc.:
Bearings Seek Economy in New Methods, by T. C. DuMond, Apr 27 p 51
Is Devaluation Another Economic Myth? by J. M. Beattie, Jan 27 p 43
Twin Shells Up Output of Electric Arc Furnace, Jan 20 p 39

Safety
Aluminum Honeycomb Survives DOT Crash Impact, Mar 9 p 54
Another Safety Problem Rears its Head, by B. D. Wakefield, Apr 6 p 59
Car Computers: 'I'll Drink to That!' by D. N. Williams, June 8 p 27
Does Ford Have Some ESP on the ESV Program? by D. N. Williams, May 18 p 23
Forgers and OSHA: Bad Housekeeping Seal of Approval? by R. A. Wilson, Apr 6 p 47
Got a Secret? So Protect It!, by C. J. Suchocki, June 15 p 22
The Jury is Out in OSHA Study of Compensation, by J. M. Beattie, Mar 16 p 61
OSHA Gets Welders up Tight About Smoking, by R. A. Wilson, Feb 24 p 51
OSHA: Guess Who Moved into the Executive Suite? Mar 30 p 27
OSHA Press Rules—Fuss, but Few Orders, by R. A. Wilson, May 25 p 73
OSHA Sets Standards Timetable, Mar 23 p 25
OSHA II, or Passing the Ball to the States, May 11 p 21
OSHAian Eye: To Catch a Thief, by C. J. Suchocki, June 15 p 22
OSHA's Forgotten Man Raises an Angry Cry, by C. J. Suchocki, May 4 p 25
Safety Agency: For the People, by the People, of the . . ., by K. A. Kaufman, Mar 30 p 21
Small Employers Put Safety Law on Trial, June 22 p 17
So You Think All Safety Cops Work for OSHA, Apr 6 p 25
To OSHA from Labor: Happy Un-Birthday, by C. J. Suchocki, Apr 27 p 42
VW on Safety: Air Bag, Nein; Gas Belt, Ya, by D. N. Williams, May 25 p 27
Will the Real Industry Safety Cop Please Stand! by D. N. Williams, June 29 p 64
Working May be Hazardous to Your Health, by D. N. Williams, Jan 20 p 22

St. Joe Mineral Corp.:
Price Boosts on Cadmium Led by Bunker Hill, by James Beizer, Mar 16 p 123
Zinc: My 'Bounty' Lies Over the Ocean? by James Beizer, Apr 13 p 48
Zinc Revives Old Refrain on Price Controls, by James Beizer, Mar 23 p 45

Salem Corp.:
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77

Salt Lake City Bureau of Mines
Will Metals' Recycling Need a Social Price Tag? by J. J. Obrzut, Jan 27 p 54

Sandia Corp.:
Carbon Composites Strengthened by Vapor Deposition, Feb 10 p 31

Sandwich Construction
Aluminum Honeycomb Survives DOT Crash Impact, Mar 9 p 54

Sargent & Lundry
Nuclear Equipment: Oh those Shipments! by J. M. Beattie, Mar 23 p 42

Satellites
ERTS: Resource Hunter from Outer Space, by C. J. Suchocki, June 29 p 29
Large Ti-Alloy Weldment to Go into Orbit, Mar 30 p 66

Sauereisen Cements Co.:
The Smaller, the Bigger the Gripe? by G. J. McManus, Feb 17 p 42

Schloemann Aktiengesellschaft
European Companies Joining Hands on Large Jobs, by G. J. McManus, May 25 p 29

Schriber Div.:
DNC: The Agony of Being First, Mar 30 p 45

Sciaky Bros., Inc.:
F-14 Puts Advanced Technology to the Test, by R. R. Irving, June 15 p 55

Science & Technology
Fill the Management Void in R&D Planning, by S. H. Hockenberry, Mar 23 p 48
GM Supplies: Anything We Can't Do You Can Do Better? by D. N. Williams, June 15 p 21
Is U. S. Technology Slip Really Showing? by J. M. Beattie, May 4 p 63
It'll be Great in 1990 if . . ., by P. J. Cathey, Feb 17 p 44
Stop the World? Not Just Yet! by Gene Beaudet, Mar 23 p 5

Scrap—Ferrous Markets and Prices, Weekly Tabulation

Scrap
Cast Grade Demand Soaring to Price Ceilings, Mar 2 p 66
Cryogenics is Not a Fragment of Scrap's Imagination, by K. W. Bennett, Mar 18 p 47
Downward Price Pressure Sets in as Market Softens, June 1 p 68
Floods in East, Lists in Midwest, Influence Market, June 29 p 111
GM Turns Scrap Turnings into PM Parts, by D. N. Williams, Feb 24 p 65
Has Market's Export Ship Finally Come In? Apr 27 p 72
High-Level Lull in Market Could Continue, May 18 p 84
Is Market Starting Summer Siesta a Little Early? May 25 p 104
It's a New Year for Scrap in Many Ways, Jan 27 p 71
Market Celebrates the New Year with Price Gains, Jan 6 p 166
Market Decides it's Too Early for a Slump, Apr 13 p 102
The Market is Yawning its Way through February, Feb 17 p 70
Market Momentum Moves into the Month of May, May 4 p 112
The Market Pauses to Catch its Breath, Feb 10 p 122
Market Shivers and Waits for the Big Thaw, Jan 20 p 48
Market Waits for Impact of the Industrial Lists, Feb 24 p 76
Market's Future Turns into a Guessing Game, Mar 16 p 124
Only Stainless Scrap in Heavy Demand; Other Grades Dead, June 15 p 74
Plastics Add Twist to Recycling Equipment, by K. W. Bennett, June 15 p 47
Prices Hold as Mid-Month Doldrum Grips Market, Mar 23 p 72

Sellers Hope it's Only a Summer Lull—Nothing Deeper, June 22 p 66
Sleepy Market Gets Ready to Come Alive in May, Apr 20 p 126
Spring Softness Hits Market as Lists Sag, Apr 6 p 78
Steel Mills Open Their Hearths to Scrap Market, Mar 9 p 70
Steel's Iron Mine Can be the City Dump, by G. J. McManus, Mar 23 p 57
Thin Market is Suffering from Lack of Demand, June 8 p 80
Will April Bring a Shower of Scrap Orders? Mar 30 p 85
Will Metals' Recycling Need a Social Price Tag? by J. J. Obrzut, Jan 27 p 54
Will the Real Scrap Market Please Stand Up, Jan 13 p 66
Will Scrap Join the Phase II Price Parade? Feb 3 p 72
Will Steel Import Quotas Affect Scrap Demand? May 11 p 74

Securities and Exchange Commission
Beware Liability Rabbit-Punch—it's Deadly, May 11 p 44

Sequence Controllers
Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50

Service Centers
January Thaw Hits Metalworking Orders, by K. W. Bennett, Jan 27 p 46
Unlock Dollars Frozen in Inventories, by K. W. Bennett, Apr 20 p 67

Shalco Systems Div.:
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87

Sharon Steel Corp.:
New BOF Vessel is Convertible to Bottom Blowing, June 29 p 33
New Oxygen Process Blowing Across Ocean to U.S.? Mar 30 p 25
1972 is Like 1966—or at Least 80 Pct of It, June 22 p 63
Sharon Midi—Mills Show Leg Up on Profits, by G. J. McManus, Mar 30 p 51

Sheet Metal Workers International Assn.:
Rail Crisis Awakens Labor Reformers, Mar 23 p 19

Shipbuilding
New Shipbuilding Orders Carry Metalworking Cargo, by K. W. Bennett, Mar 30 p 48
Newport News Gives X-Ray Top Priority, Jan 20 p 34
Sail Speed Meter Poses Interesting Materials Problems, Jan 13 p 29
Steel Summary: A Lot Rides on New Ships, Jan 20 p 45

Shot Peening
Shot Peening Extends Fatigue Life of Tractor Parts, by B. D. Wakefield, May 18 p 57

Siemag
European Companies Joining Hands on Large Jobs, by G. J. McManus, May 25 p 29

Silicone
What's Behind the Successful Drive for Silicone Parts? by W. G. Patton, May 25 p 84

Silver
New Line on Silver: It isn't So Clouded, by James Beizer, June 22 p 65
The Silver Industry Takes Another Stab at Price Predicting, by James Beizer, Feb 10 p 121

Nathan T. Skrimbolt
A. to News of the Future: Or Let's Start Horsing Around, by D. N. Williams, May 4 p 23

Small Business Administration
Technology Transfer Helps People and Products, Jan 13 p 56

A. O. Smith Co.:
Industry Opens its Purse, by G. J. McManus, Mar 23 p 39

Smith International, Inc.:
A Light Appears at the End of Tunneling Market, by K. W. Bennett, June 29 p 66

Snyder Corp.:
Transfer Machine Builders Line Up for Foreign Stations, by K. W. Bennett, Apr 6 p 46

Society of Aerospace Materials and Process Engineers
Aerospace Alloys March into New Markets, by D. C. Perry and R. R. Irving, Jan 13 p 49

Society of Automotive Engineers
Ford: Give Us Your Junk Cars, Your Old Foam . . ., by D. N. Williams, Apr 20 p 23
NDT Methods Get Attention of Automotive Men, Jan 27 p 61
Roadmap for Exhaust Control Should List Six-Stop Trip, by D. N. Williams, Mar 23 p 23

Society of Manufacturing Engineers
New Tools from New Materials, by J. E. Sandford, Apr 13 p 59
SME Conference Stresses Computers, Apr 13 p 69

Society of Plastics Engineers
Plastics Add Twist to Recycling Equipment, by K. W. Bennett, June 15 p 47

Sociology
Black Capitalism: Does it Really Work? by Samuel Pressley, June 15 p 50
Curb People's Expectations? Boost Them! by Gene Beaudet, Jan 20 p 5
Dialogue, Rapport or Task Forces to Deal with Youth? Jan 13 p 28
Ending Social Ills: Can Business Do it Better than U. S.? May 4 p 27
How Companies Can Improve Society—and Themselves, June 29 p 31
Labor 2040: Population Crisis or Fertility Rite? June 1 p 21

Soldering
Hand-Held Flameless Torch Reaches 1100°F, Mar 9 p 27

Sony Corp. of America
It's Prime Time for Consumer Electronics, by K. W. Bennett, June 22 p 35

South America
This May Not Do You One Bit of Good, by Gene Beaudet, May 18 p 5

Spare Parts
Automakers Put Fat Parts List on Diet, by D. N. Williams, June 22 p 37

Sperry Rand Corp.:
Future Managers: Spot Them Fast, Challenge Them Often, by P. J. Cathey, June 15 p 23
Is Devaluation Another Economic Myth? by J. M. Beattie, Jan 27 p 43

Albert W. Spitz & Associates
Will Metals' Recycling Need a Social Price Tag? by J. J. Obrzut, Jan 27 p 54

Sprague Electric Co.:
The Dawning of a New Age of Electronics? by K. W. Bennett, Feb 3 p 40

Square D. Co.:
Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50

Stainless Processing, Inc.:
Cryogenics is Not a Fragment of Scrap's Imagination, by K. W. Bennett, May 18 p 47

Stainless Steel
Aluminum, Stainless Prices: Going Down the Up Stairs, by James Beizer, May 11 p 41
Chromium Recovery Improved in Stainless Refining, June 8 p 59
Only Stainless Scrap in Heavy Demand; Other Grades Dead, June 15 p 74
Porous Stainless Tubing Clarifies Water, Apr 27 p 27

Stampings
Multiple Linkage Press Drives Looking Up, by B. D. Wakefield, May 18 p 62

Standard Oil Co. of Indiana
OSHA's Forgotten Man Raises an Angry Cry! by C. J. Suchocki, May 4 p 25

Standard Tool and Mfg. Co.:
Get it Together with Automatic Assembly, by R. A. Wilson, June 29 p 82

Standards
Automakers Put Fat Parts List on Diet, by D. N. Williams, June 22 p 37
Cadillac Begins GM's Standardization of Engine Plan, by D. N. Williams, May 11 p 24
Chrysler's Controls: Or Now it's Phase I for Fasteners, by D. N. Williams, Apr 6 p 23
Everybody Has to Lose Arizona Copper Case, by James Beizer, Jan 13 p 37
Press Stops When Arm Breaks Light Beam, Feb 10 p 85

Stanford University
Smog Control: 'I Shot a Laser into the Air . . .', Apr 20 p 25

Station Wagons
Big 3 in Battle for New Market in Subcompact Wagons, by D. N. Williams, Feb 24 p 23

Steel
Abrasives and Heat Simplify Cutting-Off of Steel Bars, June 22 p 55
Annual Statistical Review—Metal Prices and Production as of January 6, 1972, Jan 6 p 113
Computer Sets Charge Makeup for Steel, May 11 p 55
How to Win Friends and Influence Buyers? by G. J. McManus, Apr 20 p 73
I-F Steel Brings New Promise to Drawability, Jan 20 p 32
Korf Steel Group: To Hamburg from South Carolina, with Profit, by G. J. McManus, May 4 p 68
New Coating Helps Carbon Steel Outperform Stainless, June 15 p 25
New Treatment Increases Toughness in Alloy Steels, June 8 p 61
Process Factors Equip Steel for Arctic Service, Mar 2 p 47
Sharon Midi-Mills Show Leg Up on Profits, by G. J. McManus, Mar 30 p 51
Steel Can Rest Comfortably After Tank-Car Diagnosis, by C. J. Suchocki, May 25 p 72
Steel Fibers Reinforce Concrete, May 11 p 27
Steel Summary, Cyclops Struggles with Detroit, Apr 27 p 69
Steel Summary: 'Grand Tour' of Technology, by G. J. McManus, June 15 p 71
Steel's Iron Mine Can be the City Dump, by G. J. McManus, Mar 23 p 57
A Third Coated Steel is Ready to Roll, by R. R. Irving, June 1 p 52

Steel Co. of Canada, Ltd.:
Bethehem Ponders Huge Blast Furnace, by G. J. McManus, Mar 30 p 65

Steel Industry
All Things Considered, It Could Have Been Worse, by H. R. Neal, Apr 20 p 79
Armco: Generalist-Specialist Looks Ahead, by G. J. McManus, May 18 p 57
The Best is Yet to Come, by Gene Beaudet, June 22 p 43
Don't Sell Phase II Short, Asks USWA's Abel, by G. J. McManus, Feb 3 p 45
FTC is After Cereal Makers as Auto Warm-Up? by K. A. Kaufman, Feb 3 p 21
Has the Import Situation Really Gone Critical? by G. J. McManus, Feb 10 p 69
He Says it's Hogwash and He's Sick of It, by Gene Beaudet, June 8 p 5
Hire Top Managers Who Know Buyer's Problems, by R. A. Wilson, June 1 p 44
Import Quota Fine Print Holds Sleepers, June 8 p 51
Industries' Latest Problem-Profits, by G. J. McManus, Mar 30 p 45
1972 is Like 1966-or at Least 80 Pct of It, June 22 p 63
Quotas: 'About the Best We Could Get', by G. J. McManus, Jan 20 p 28
Quota: Not the 'Whole' Thing, But . . ., by K. A. Kaufman, May 11 p 38
SSCI Orders Indicate Recovery Continues, by Gene Beaudet, May 18 p 48
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Steel Labor '74: Dispensing with Crisis Tactics, Mar 16 p 21
Steel Quotas: Are Agreements in the Mail? by G. J. McManus, Apr 13 p 43
Steel Summary: Answering the Industry Critics, Apr 20 p 123
Steel Summary: Are Quota Pacts Finally Ready? Mar 30 p 83
Steel Summary: Dynamic Era of Progress Dawning? Jan 6 p 163
Steel Summary: Fairly Big Year in the Offering? Jan 27 p 67
Steel Summary: First-Quarter Profits Decline, May 4 p 109
Steel Summary: 'Front-Runners' are Looking Up, Mar 2 p 63
Steel Summary: 'Grand Tour' of Technology, by G. J. McManus, June 15 p 71
Steel Summary: Imports Plunge in April, June 8 p 77
Steel Summary: Industry Loses the Blues, June 1 p 65
Steel Summary: It Has Been a Week of UPs, Feb 10 p 119
Steel Summary: A Lot Rides on New Ships, Jan 20 p 45
Steel Summary: March Comes in Like a Lion, Mar 9 p 67
Steel Summary: No Building Boom this Summer, June 22 p 63
Steel Summary: No Time to Wait for a Boom, Mar 16 p 78
Steel Summary: No Wild Cheers for Quota Pact, May 18 p 81
Steel Summary: Record Imports Hit Where it Hurts, Feb 3 p 69
Steel Summary: Recovery Has Solid Base, Apr 7 p 75
Steel Summary: Reviving, but Not 'Fully Recovered', Feb 17 p 67
Steel Summary: Second Quarter Points the Way, May 25 p 101
Steel Summary: Shootout on the Price Front, Jan 13 p 63
Steel Summary: Signaling a Turnaround? Mar 23 p 69
Steel Summary: Steel Imports Within Quotas, May 11 p 71
Steel Summary: Voluntary Quotas Harm Specialty Firms, Apr 13 p 99

Steel Summary: World Markets Coming to Life, June 29 p 107
Steel Summary: Worst of Slump Appears Over, Feb 24 p 73
Steel to Connally: Sorry to See You Go, John? by K. A. Kaufman, May 25 p 25
Steel's Profits Go Overseas, by G. J. McManus, Feb 3 p 42
U. S. Manufacturing: 10, 9, 8, 7, 6, 5, 4, 3, 2 . . . ? by G. J. McManus, May 25 p 69
Where there's Smoke . . ., by G. J. McManus, June 1 p 42

Steelmaking

Bethlehem Ponders Huge Blast Furnace, by G. J. McManus, Mar 30 p 65
Calcium Carbide Injected by Lance into Molten Pig, May 4 p 82
Chromium Recovery Improved in Stainless Refining, June 8 p 59
Cold Forming a Hot New Turf, by R. A. Wilson, May 11 p 52
Coming Soon: French LWS Process for Steelmaking, by G. J. McManus, June 29 p 80
Direct Reduction is Not Dead, by G. J. McManus, Feb 10 p 70
European Countries Joining Hands on Large Jobs, by G. J. McManus, May 25 p 29
Finding the Missing Link in Steel Technology, May 25 p 29
From Sweden: Ferroalloys without Air Pollution, by R. R. Irving, June 15 p 44
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77
New Oxygen Process Blowing Across the Ocean to U.S.? Mar 30 p 25
New Rolls Last Longer in Furnace Service, Mar 9 p 56
New Treatment Increases Toughness in Alloy Steels, June 8 p 61
Twin Shells Up Output of Electric Arc Furnace, Jan 20 p 39
Will Metals' Recycling Need a Social Price Tag? by J. J. Obrzut, Jan 27 p 54

Steel Service Center Institute

SSCI Orders Indicate Recovery Continues, by Gene Beaudet, May 18 p 48
Too Much Month Left at the End of the Money, by R. A. Wilson, Feb 17 p 40

Steel Summary—Weekly Appraisal of Marketing and Production

Stellite Div.:

ESR Outperforms VAR in Making Superalloys, by T. C. DuMond, May 11 p 49

Stone and Webster Engineering Corp.:

Teachers Working and Learning —in Industry? Jan 27 p 27

Strippit Div.:

Machine Builders: Again, Hopeful Hearts, by R. A. Wilson, Mar 2 p 38

Süddeutsche Kalksticksoff Werke, AG

Calcium Carbide Injected by Lance into Molten Pig, May 4 p 82

Leon H. Sullivan

Black Capitalism: Does it Really Work? by Samuel Pressley, June 15 p 50

Sunbeam Corp.:

Giants Go, but Small Wares Prosper, by K. W. Bennett, Mar 23 p 44

Sundstrand Machine Tool Co.:

A/C: Rare Bird that's Drawing a Crowd, by K. W. Bennett, May 4 p 65
Population Explosion - Industrial Robot Style, by K. W. Bennett, May 25 p 67

Sun Shipbuilding & Drydock Co.:

New Shipbuilding Orders Carry Metalworking Cargo, by K. W. Bennett, Mar 30 p 48

Swanson-Erie Corp.:

Get it Together with Automatic Assembly, by R. A. Wilson, June 29 p 82

Sweden

From Sweden: Ferroalloys without Air Pollution, by R. R. Irving, June 15 p 44
Swedish Drill Fills Gap in U. S. Market, by B. D. Wakefield, Feb 24 p 62
Twin Shells Up Output of Electric Arc Furnace, Jan 20 p 39

Swindell-Dressler Co.:

Steel's Iron Mine Can be the City Dump, by G. J. McManus, Mar 23 p 57

Syntron Div.:

Population Explosion—Industrial Robot Style, by K. W. Bennett, May 25 p 67

T

TRW, Inc.:

How Much Capacity is Really Useable? by R. A. Wilson, June 15 p 48
Productivity: Like Motherhood, But—, by P. J. Cathey, June 1 p 39
TRW Seeks Answer to Cost Squeeze in World's Largest Mechanical Forging Press, by R. A. Wilson, Feb 17 p 56
Who Said this Industry is De-Pressed? by K. W. Bennett, June 22 p 40

Taiwan

IUE Queries Nixon on U.S.—Formosa Issues, Mar 16 p 27
Taiwan Shifting its Policies for New Trade? Mar 16 p 27

Tank Cars

Steel Can Rest Comfortably After Tank-Car Diagnosis, by C. J. Suchocki, May 25 p 72

Tax Foundation, Inc.:

Tax Reform: From Feudal to Futile? by G. J. McManus, May 18 p 46

Taxes

Acupuncture and the Value-Added Tax, by Gene Beaudet, Apr 20 p 5
Budget Red Ink Still Putting a Stain on Economy? by K. A. Kaufman, Feb 10 p 23
Burns Gives Floating Tax Credits Some More Resuscitation, by K. A. Kaufman, Mar 16 p 23
A Full Employment What? by Gene Beaudet, Feb 3 p 5
Getting Tax Breaks for Trashy Products? June 8 p 51
The Loopholes in the Loopholes, by Gene Beaudet, June 29 p 5
Mills Tax Bill Makes Some Mountains on Capitol Hill, by K. A. Kaufman, June 15 p 20
Nader Comes Up with Another Taxing Problem, by K. A. Kaufman, May 18 p 21
No Wonder They Flipped the Dial, by Gene Beaudet, June 15 p 5
Not with My Taxes You Don't! by Gene Beaudet, May 4 p 5
Now it's the Taxpayers Who Can Stop Inflation, by K. A. Kaufman, June 22 p 19
Politics or Not, there's a Tax Increase Coming . . ., by K. A. Kaufman, June 1 p 23
The Smaller, the Bigger the Gripe? by G. J. McManus, Feb 17 p 42
Social Security: The Wor$t is Yet to Come, by K. A. Kaufman, June 22 p 19
Tax Reform in Election Year: A White Elephant? by K. A. Kaufman, Feb 17 p 21
Tax Reform: From Feudal to Futile? by G. J. McManus, May 18 p 46
The Tax Reformers: Or, You Have to Hand it to Them! by K. A. Kaufman, June 8 p 25
Taxes: Governors' Club Fights VAT 72, by K. A. Kaufman, Mar 2 p 20
This May Not Do You One Bit of Good, by Gene Beaudet, May 18 p 5
Value-Added Tax: A Pox at the Ballot Box, by K. A. Kaufman, Jan 20 p 12
Washington '72: Color it Political, by K. A. Kaufman, Jan 6 p 90

Technical Information

Technology Transfer Helps People and Products, Jan 13 p 56

Techfront—Weekly Analysis of New Developments in the Metalworking and Related Industries

Technology

Data Banks Serve Industry's Need to Know, by A. M. Greene, Apr 6 p 57
Does Your Company Keep its Know-How Secret? Wise Up, Jan 20 p 14
F-14 Puts Advanced Technology to the Test, by R. R. Irving, June 15 p 55
Is U. S. Technology Slip Really Showing? by J. M. Beattie, May 4 p 63
Managers Arise to Defend Technology from the Wolves, by P. J. Cathey, Apr 20 p 27
NR Works to Adapt Space Lore, by T. C. DuMond, Jan 13 p 55
Steel Summary: 'Grand Tour' of Technology, by G. J. McManus, June 15 p 71
Technology Transfer Helps People and Products, Jan 13 p 56
Will Metals' Recycling Need a Social Price Tag? by J. J. Obrzut, Jan 27 p 54

Teflon

Teflon Has a Knack for Solving Problems, by J. J. Obrzut, June 22 p 51

Tek Tran, Inc.:

NR Works to Adapt Space Lore, by T. C. DuMond, Jan 13 p 55

Teledyne, Inc.:

Hire Top Managers Who Know Buyer's Problems, by R. A. Wilson, June 1 p 44

Teledyne McKay Co.:

Cored Fine Wire Solves 'Cold Shut' Problems, by R. R. Irving, Feb 24 p 63

Teledyne Ohio Steel Div.:

Hire Top Managers Who Know Buyer's Problems, by R. A. Wilson, June 1 p 44

Teledyne Precision-Cincinnati Co.:

Get it Together with Automatic Assembly, by R. A. Wilson June 29 p 82

Teledyne Readco

Positioners Take the Downtime Out of Welding, by R. R. Irving, Mar 30 p 60

Television

It's Prime Time for Consumer Electronics, by K. W. Bennett, June 22 p 35

Tenneco, Inc.:

Newport News Gives X-Ray Top Priority, Jan 20 p 34

Testing & Inspection

NDT Methods Get Attention of Automotive Men, Jan 27 p 61
NDT: Process Control or Legal Defense? by B. D. Wakefield, Jan 27 p 60
Newport News Gives X-Ray Top Priority, Jan 20 p 34

Textron Co.:

Basic Machine Tool Builder Continues Challenging Imports, by J. E. Sandford, Mar 9 p 42

Thermo Magnetics, Inc.:

Solid State Bonding Joins Similar, Dissimilar Metals, Feb 24 p 28
Solid State Joints Formed Under Electromagnetic Pressure, by J. J. Obrzut, Apr 20 p 92

Thomson Industries, Inc.:

Bearings Seek Economy in New Methods, by T. C. DuMond, Apr 27 p 51

August-Thyssen Hütte, AG

Calcium Carbide Injected by Lance into Molten Pig, May 4 p 82

Tilden Mining Co.:

Ore Men Iron Out Their Problems, by R. A. Wilson, Apr 13 p 46

Timken Co.:

Bearings Seek Economy in New Methods, by T. C. DuMond, Apr 27 p 51

Tin

Canmaking's New Battleground: The D & I Process, by G. J. McManus, June 29 p 68

Titanium

F-14 Puts Advanced Technology to the Test, by R. R. Irving, June 15 p 55
Inertia Welds Take on Bimetallic Fasteners, by W. B. Causey, Apr 6 p 63
Joining Processes Tackle Titanium for Aircraft Parts, June 8 p 31
Large Ti-Alloy Weldment to Go into Orbit, Mar 30 p 66
President Says 'Blast Off' for Space Shuttle, by A. M. Greene, Jan 13 p 45

E. H. Titchener and Co.:

Wiremen Eye New Mills and Materials, by B. D. Wakefield, May 4 p 79

Tocco Div.:

Cold Forming Occupies a Hot New Turf, by R. A. Wilson, May 11 p 52

Todd Shipyards Corp.:

New Shipbuilding Orders Carry Metalworking Cargo, by K. W. Bennett, Mar 30 p 48

Tool and Die Industry

Iron Curtain Creaks Open for Tool, Die Work, by K. A. Kaufman, June 22 p 39
No Chance for Job Shop Price Exemption Approval, by K. A. Kaufman, Apr 6 p 43
Tool and Die: Starting on the Road Back, by R. A. Wilson, Jan 27 p 50

Toolmaster Corp.:

The Price Controls Squeeze Play? by K. A. Kaufman, K. W. Bennett and G. J. McManus, May 11 p 35

Tool Steel
Fine Grain Super Tool Steels Make Fine Grinding Easier, Apr 20 p 90
Import Quota Fine Print Holds Sleepers, June 8 p 51

Tools for Freedom
This May Not Do You One Bit of Good, by Gene Beaudet, May 18 p 5

Towers, Perrin, Forster & Crosby, Inc.:
Every Manager Can Learn to Live with Phase II, Feb 10 p 29

Towmotor Corp.:
Materials Handling is in an Uplift, by K. W. Bennett, Apr 20 p 72

Townsend Co.:
Buyers Now Seek Service, Not Inventories, by G. J. McManus, Feb 24 p 47
Inertia Welds Take on Bimetallic Fasteners, by W. B. Causey, Apr 6 p 63
Inventories: Recovery's Missing Link, by K. A. Kaufman, G. J. McManus and R. A. Wilson, June 8 p 44

Toyo Kogyo
GM Wankel Tooling Grinds to a Start, by D. N. Williams, June 1 p 36
Wankel Barbs are Competitor Sour Grapes, Says Mazda, by D. N. Williams, June 22 p 21

Training Programs
NAB II: A New Look in Hard-Core Training, June 8 p 23

Transfer Machines
See: Machine Tools

Transportation
Federal Funds Accelerate Mass Transit, by T. C. DuMond, Mar 23 p 52
Nixon Trucking Bill: 'To Brink of Disaster and Beyond . . .'? by D. N. Williams, June 15 p 45
Sure, the Automakers are at Transpo, by D. N. Williams, June 1 p 40
Transpo '72: Showcase for What's Not New, by K. A. Kaufman, June 1 p 40

Tri-Ordinate Corp.:
Wankel, Wankel, Little Car, How They Wonder How You Are, by D. N. Williams, Mar 30 p 23

Trucks
Detroit in Driver's Seat as Trucks Boom, by D. N. Williams, May 25 p 70
GM and Ford: Mini-Trucks for Mini-Countries, by D. N. Williams, June 1 p 25
GM's Trucks: First Place or Bust? by D. N. Williams, Jan 20 p 13
Nixon Trucking Bill: 'To Brink of Disaster and Beyond . . .'? by D. N. Williams, June 15 p 45
Not All Reasons for Use of Aluminum are Light Weight, by James Beizer, Jan 13 p 65

Tubing
Finished Dimensions Govern Tube Bending, May 18 p 55
Porous Stainless Tubing Clarifies Water, Apr 27 p 27
What Parts Can You Make from Tubing? Apr 6 p 61

Tunneling Equipment
A Light Appears at the End of Tunneling Market, by K. W. Bennett, June 29 p 66

Turbines
GM's Pushing to Develop Turbine Auto? by D. N. Williams, Jan 27 p 23

U

U.S.S.R.
From Russia with Love—If You Have a License? by J. M. Beattie, June 22 p 38
Iron Curtain Creaks Open for Tool, Die Work, by K. A. Kaufman, June 22 p 39
MHD: An Answer to Energy Crisis? Jan 27 p 25
Paybacks before Payoffs, June 22 p 39
Tool and Die: Starting on the Road Back, by R. A. Wilson, Jan 27 p 50
What's Behind Machine Tool Curtain? by K. A. Kaufman and R. A. Wilson, June 8 p 46

U. S. Army Corps of Engineers
Ruling Revives State Standard's Debate, Jan 27 p 25

U. S. Army Mobility Equipment Research and Development Center
Military Pipelines Can be Made in the Field, Apr 13 p 29

U. S. Department of Commerce
Getting into New World Markets: Or Bring Back Licensing, June 22 p 23
Multinationals: Labor Finds No Help at Commerce, Feb 10 p 21
Needed: All-Out Strategy for U. S. Growth, by K. A. Kaufman, May 4 p 73
1976: A Brotherly Shove Needed? by J. M. Beattie, Jan 20 p 26
Outlook: Everything Coming Up Roses? by K. A. Kaufman, May 4 p 67
Paybacks before Payoffs, June 22 p 39

U. S. Department of Labor
Jobless Rate: There's a Bright Side, Too, Jan 27 p 19
OSHA Sets Standards Timetable, Mar 23 p 25
To OSHA from Labor: Happy Un-Birthday, by C. J. Suchocki, Apr 27 p 42
War and Peace: Unions Declare War to End War, May 11 p 21

U. S. Department of State
Steel Quotas: Are Agreements in the Mail? by G. J. McManus, Apr 13 p 43

U. S. Department of Transportation
Aluminum Honeycomb Survives DOT Crash Impact, Mar 9 p 54
Federal Funds Accelerate Mass Transit, by T. C. DuMond, Mar 23 p 52
Nixon Trucking Bill: 'To Brink of Disaster and Beyond . . .'? by D. N. Williams, June 15 p 45
Transpo '72: Showcase for What's Not New, by K. A. Kaufman, June 1 p 40

U. S. Industries, Inc.:
Who Said this Industry is De-Pressed? by K. W. Bennett, June 22 p 40

U. S. Steel Corp.:
Canmaking's New Battleground: The D & I Process, by G. J. McManus, June 29 p 68
Cold Forming Occupies a Hot New Turf, by R. A. Wilson, May 11 p 52
Coming Soon: French LWS Process for Steelmaking, by G. J. McManus, June 29 p 80
EPA: Shake Things Up and Worry Later, by G. J. McManus, Mar 2 p 36
as the Import Situation Really Gone Critical? by G. J. McManus, Feb 10 p 69
e Says It's Hogwash and He's Sick of It, by Gene Beaudet, June 8 p 5
eat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77
ot Formed Railroad Wheels in Four Minutes, May 25 p 33
U. S. Technology Slip Really Showing? by J. M. Beattie, May 4 p 63
ader Comes Up with Another Taxing Problem, by K. A. Kaufman, May 18 p 21
New Era for Rod Mills: Build One or Get Out! by G. J. McManus, June 22 p 41
ew Oxygen Process Blowing Across the Ocean to U.S.? Mar 30 p 25
he Search for America, Inc., by G. J. McManus, Jan 6 p 95
teel Summary: 'Grand Tour' of Technology, by G. J. McManus, June 15 p 71
teel Summary: No Wild Cheers for Quota Pact, May 18 p 81
teel Summary: Record Imports Hits Where it Hurts, Feb 3 p 69
teel Summary: Reviving, but Not 'Fully Recovered', Feb 17 p 67
teel Summary: Shootout on the Price Front, Jan 13 p 63
here there's Smoke . . ., by G. J. McManus, June 1 p 42
iremen Eye New Mills and Materials, by B. D. Wakefield, May 4 p 79

U. . Steel Supply Co.:
nlock Dollars Frozen in Inventories, by K. W. Bennett, Apr 20 p 67

Ultrasonics
14 Puts Advanced Technology to the Test, by R. R. Irving, June 15 p 55

Undersea Technology
Ocean Listed as Potential Source of Energy Fuel, Jan 6 p 28

Unination, Inc.:
Forgers and OSHA: Bad Housekeeping Seal of Approval? by R. A. Wilson, Apr 6 p 47
Population Explosion - Industrial Robot Style, by K. W. Bennett, May 25 p 67

Union Carbide Corp.:
New Cutting Tool Material Moves into Production Stage, by R. A. Wilson, May 11 p 54
New Nodulizer Curbs Smoke, Fumes for Ductile Iron, Mar 2 p 50
New Tools from New Materials, by J. E. Sandford, Apr 13 p 59
Portable Unit Takes Electropolishing to Workpiece, Mar 30 p 29
Systems Convert Town Trash to Fuel Gas, Feb 3 p 27
Tooling Materials Push Lathe Limits, by R. A. Wilson, Mar 9 p 38
Users Strike Gold in Ucon, May 4 p 29
Welding is a Domestic Affair, by D. N. Williams, Apr 20 p 74
What's Behind the Successful Drive for Silicone Parts? by W. G. Patton, May 25 p 84

Union Oil Co. of California
Gas War—or How to Keep the Lead In, by C. J. Suchocki, May 18 p 25
Industrial Buyers 'Policing' Price Moves, by G. J. McManus, Jan 20 p 24

United Aircraft Corp.:
Managers Arise to Defend Technology from the Wolves, by P. J. Cathey, Apr 20 p 27

United Auto Workers
Aero Veto: Harbinger of the Hardline? Jan 13 p 21
Lordstown Shootout: Cost-Cutters vs. New Labor, by D. N. Williams and R. A. Wilson, Feb 3 p 38
Pay Board: Ruling Against the Rulemaker? Feb 17 p 19
Productivity: Like Motherhood. But—, by P. J. Cathey, June 1 p 39
Profit Crunch Tames Union Urges, by D. N. Williams, Feb 10 p 67
Reporter's Notebook: The Death of Soul, by W. J. Kalb, May 4 p 66
Tool and Die: Starting on the Road Back, by R. A. Wilson, Jan 27 p 50
UAW: Only the Name's the Same, by C. J. Suchocki, May 4 p 66
UAW vs Japan: A Different Kind of Workstyle, Apr 27 p 17
Who's Running Things Around Here? by Gene Beaudet, Mar 2 p 5

United Flat Rolled Products Co.:
January Thaw Hits Metalworking Orders, by K. W. Bennett, Jan 27 p 46

United Kingdom
Britain Beset by Coal Strike, Labor Woes, Feb 17 p 25
Britain's Coal Miners' Strike Hurt Production Output, Mar 2 p 22
Detroit Engine Sales Start to Purr in British Market, June 8 p 29
Imports: The British are Stating . . ., by D. N. Williams, Feb 17 p 23
London's Copper Price Pendulum Gives U.S. Producers the Jitters, by James Beizer, June 8 p 79

United Kingdom Atomic Energy Research Establishment
Glow Discharge Electron Beams Weld, Melt and Coat, June 1 p 29

United Mineworkers of America
UMW Presents: A Modern-Day Morality Play, May 18 p 19

United Steelworkers of America
Abel Canes PB: Like Flogging a Dead Horse? Mar 9 p 19
Abel Hails 'Pro' Pay Plan; Rips Construction Hikes, Mar 2 p 19
Don't Sell Phase II Short, Asks USWA's Abel, by G. J. McManus, Feb 3 p 45
Industries' Latest Problem-Profits by G. J. McManus, Mar 30 p 45
Job Market Starts to Crack Open, by K. W. Bennett, G. J. McManus, D. N. Williams and R. A. Wilson, Apr 27 p 37
The Puzzle of Productivity, by G. J. McManus and J. M. Beattie, Mar 9 p 40
Steel Labor '74: Dispensing with Crisis Tactics, Mar 16 p 21
Steel Summary: Dynamic Era of Progress Dawning? Jan 6 p 163
USWA Strikes Kaiser in 'Sharing' Dispute, Feb 10 p 21

United Transportation Union
Pay Board: Another Game of 'Catch', Feb 3 p 19

Univac Div.:
Computers' Big Payoff for Small Businesses, by A. M. Greene, Mar 30 p 63
Future Managers: Spot Them Fast, Challenge Them Often, by P. J. Cathey, June 15 p 23
Is Devaluation Another Economic Myth? by J. M. Beattie, Jan 27 p 43
Maxis to Minis, Computers are Calculating Gains, by K. W. Bennett, May 11 p 39

Universal-Cyclops Specialty Steel Div.:
New Rolls Last Longer in Furnace Service, Mar 9 p 56

University of Illinois
Computer Sets Charge Makeup for Steel, May 11 p 55

University of Michigan
Bad Marriage Hurts Career, Not Vice Versa, June 29 p 31
Being Successful and Miserable-at Same Time, Mar 23 p 27
Economists See Few 'Ifs, Ands and Buts', Jan 6 p 84
GM Plants Seeds to Develop CAM Machinery, by J. E. Sandford, Feb 24 p 53

University of Nebraska
Teachers Working and Learning —in Industry? Jan 27 p 27

University of Pennsylvania
Economists See Few 'Ifs, Ands and Buts', Jan 6 p 84

University of Pittsburgh
Is U. S. Technology Slip Really Showing? by J. M. Beattie, May 4 p 63

University of Wisconsin
Are Wage-Price Controls a Portend? by K. A. Kaufman, Jan 27 p 21
Cryogenics is Not a Fragment of Scrap's Imagination, by K. W. Bennett, May 18 p 47
Phosphate Coating Solves Problems in Bolt Tightening, June 22 p 27

Urban Mass Transportation Administration
Federal Funds Accelerate Mass Transit, by T. C. DuMond, Mar 23 p 52

Used Machinery—Clearing House for Variety of Not-So-New Equipment

V

Vacuum Technology
ESR Outperforms VAR in Making Superalloys, by T. C. DuMond, May 11 p 49
Fluxless Brazing Goes High Production, by R. A. Wilson, Apr 27 p 56

Valley Camp Coal Co.:
Coal's Future: Dig We Must, but Dig We Can't, by R. A. Wilson, May 18 p 45

Value Engineering
Value Engineering Brings CNC into Focus, by R. A. Wilson, May 25 p 81
Value Engineering: It's Come a Long Way, by B. D. Wakefield, Mar 16 p 75

Van Norman Machine Co.:
Unbalanced Parts are Centerless Ground, by D. N. Williams, June 8 p 64

Vega Servo-Control, Inc.:
Detroit Plugs in to Solid State, by J. E. Sandford, Feb 3 p 50

Versatran Div.:
Population Explosion - Industrial Robot Style, by K. W. Bennett, May 25 p 67

Verson Allsteel Press Co.:
Cold Forming Occupies a Hot New Turf, by R. A. Wilson, May 11 p 52
Who Said this Industry is De-Pressed? by K. W. Bennett, June 22 p 40

Vertol Div.:
Federal Funds Accelerate Mass Transit, by T. C. DuMond, Mar 23 p 52

Volkart Bros., Inc.:
High-Speed Grinder Has Continuous Output, by J. J. Obrzut, May 4 p 86

Volkswagen, AG
Car Computers: 'I'll Drink to That!' by D. N. Williams, June 8 p 27
VW on Safety: Air Bags, Nein: Gas Belt, Ya, by D. N. Williams, May 25 p 27
Volkswagen Makers Expecting 'Slow Crawl' in '72, Feb 3 p 25

Volkswagen of America, Inc.:
Auto Imports: Less Worrying and Buy U.S., by D. N. Williams and James Beizer, Apr 6 p 41

Volunteer Structures, Inc.:
Handling Taken Out of Beam Fabrication, by J. J. Obrzut, Feb 24 p 61

W

Wackenhut Corp.:
Court Pulls Plug on NLRB's Successor Powers, May 25 p 23

Wages and Prices
Abel Hails 'Pro' Pay Plan; Rips Construction Hikes, Mar 2 p 19
Administration Says Profits Show Price-Control Breakdown, by K. A. Kaufman, Apr 20 p 21
Aero Veto: Harbinger of the Hardline? Jan 13 p 21
Are Wage-Price Controls a Portend? by K. A. Kaufman, Jan 27 p 21
Don't Sell Phase II Short, Asks USWA's Abel, by G. J. McManus, Feb 3 p 45
Every Manager Can Learn to Live with Phase II, Feb 10 p 29
Is Our Attention Span Narrowing? by Gene Beaudet, Jan 27 p 5
Labor '72: Planning Bumps Demanding, by C. J. Suchocki, Jan 13 p 40
Meany Uses Price Panel to Grind Labor's Axe, Apr 6 p 19
No Chance for Job Shop Price Exemption Approval, by K. A. Kaufman, Apr 6 p 43
Pay Board Defrosts Back Pay, Jan 20 p 11
Pay Board Turns Down Screws on Deferred Wages, June 15 p 19
Pay Board Works Out the Fringes, Mar 2 p 19
The Price Controls Squeeze Play? by K. A. Kaufman, K. W. Bennett and G. J. McManus, May 11 p 35
The Search for America, Inc., by G. J. McManus, Jan 6 p 95
Spare a Thought for the Archie Bunkers . . ., by J. M. Beattie, May 11 p 35
Wage-Price Assured Long Run by Administration, by K. A. Kaufman, Feb 3 p 41
Want Price Rise? How's Your Productivity Rate? by J. D. Baxter, Feb 10 p 74

Walco National Corp.:
Unraveling the Porter-Disston-Nicholson Caper, by G. J. McManus, Apr 13 p 47

Walker Wire & Steel Co.:
Pollution Control: Rinse Out a Profit, by R. A. Wilson, Feb 17 p 48

Wall Colmonoy Corp.:
Ceramics Begin to Answer Industry's Burning Questions, by A. M. Greene, June 22 p 48

George Wallace
George Wallace and Hartke-Burke? by Gene Beaudet, Apr 6 p 5

Waring Products Div.:
Giants Go, but Small Wares Prosper, by K. W. Bennett, Mar 23 p 44

Warner & Swasey Co.:
Election Year '72 Forming as Profit Year for Tool Builders, by R. A. Wilson, Jan 6 p 86
Industry Opens its Purse, by G. J. McManus, Mar 23 p 39
Inventories: Recovery's Missing Link, by K. A. Kaufman, G. J. McManus and R. A. Wilson, June 8 p 44
Is Devaluation Another Economic Myth? by J. M. Beattie, Jan 27 p 43
Machine Builders: Again, Hopeful Hearts, by R. A. Wilson, Mar 2 p 38
Machine Tools: Caveat Gets Empted, by R. A. Wilson, May 11 p 40
The New Technology in Low Cost NC, by J. E. Sandford, June 1 p 48
Too Much Month Left at the End of the Money, by R. A. Wilson, Feb 17 p 40
Tooling Materials Push Lathe Limits, by R. A. Wilson, Mar 9 p 38
Warner & Swasey Veers Back to Machine Tools, Jan 6 p 13

Washington News Report—Weekly Interpretation of Legislation and Other Government (See Also K. A. Kaufman)

Waste Management
Closed Loop System Turns Waste Water Back into Oil, Mar 9 p 55
Control Pollution Without Capital Outlay, by J. J. Obrzut, Mar 2 p 48
EPA Throws '73 Budget 'Down the Sewer', Feb 24 p 25
Ecology Costs: The Price of Action Comes High, Jan 13 p 27
Getting Tax Breaks for Trashy Products? June 8 p 51
Plastics Add Twist to Recycling Equipment, by K. W. Bennett, June 15 p 47
Solid Waste: From Dirty Sludge to Clean Dirt, Feb 10 p 27
Steel's Iron Mine Can be the City Dump, by G. J. McManus, Mar 23 p 57
Systems Convert Town Trash to Fuel Gas, Feb 3 p 27
Will Metals' Recycling Need a Social Price Tag? by J. J. Obrzut, Jan 27 p 54

Waterbury Farrel Co.:
Cold Forming Occupies a Hot New Turf, by R. A. Wilson, May 11 p 52
Tooling Materials Push Lathe Limits, by R. A. Wilson, Mar 9 p 38

Water Management
Water, Water Everywhere-Even Some to Drink, by K. W. Bennett, June 15 p 43

Waupaca Foundry, Inc.:
Foundry Future Rides on New Equipment, by R. A. Wilson, Apr 20 p 87

Waveguard Div.:
Press Stops When Arm Breaks Light Beam, Feb 10 p 85

Wean-United, Inc.:
Industry Opens its Purse, by G. J. McManus, Mar 23 p 39

Weirton Steel Div.:
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77

Welding
Back-Up Tape Gives Full Penetration in One-Side Welding, June 8 p 65
Cored Fine Wire Solves 'Cold Shut' Problems, by R. R. Irving, Feb 24 p 63
Drop-Out Manager Turns on Controls, by K. W. Bennett, Apr 13 p 49
EB Welding Builds Melting Electrodes, Jan 20 p 39
F-14 Puts Advanced Technology to the Test, by R. R. Irving, June 15 p 55
Glow Discharge Electron Beams Weld, Melt and Coat, June 1 p 29
Inertia Welds Take on Bimetallic Fasteners, by W. B. Causey, Apr 6 p 63
Newport News Gives X-Ray Top Priority, Jan 20 p 34
1972 Welding Show Opens in Detroit, Mar 30 p 68
OSHA Gets Welders up Tight About Smoking, by R. A. Wilson, Feb 24 p 51
Positioners Take the Downtime Out of Welding, by R. R. Irving, Mar 30 p 60
Slot Welding Helps Aluminum Present Smooth Surface, Apr 13 p 66
Welding Industry Puts New Technology into Production, Apr 20 p 29
Welding is a Domestic Affair, by D. N. Williams, Apr 20 p 74

Wellman Dynamics Corp.:
NDT: Process Control or Legal Defense? by B. D. Wakefield, Jan 27 p 60

Wells Mfg. Co.:
Low-Cost NC Closes the Loop, by J. E. Sandford, May 25 p 87

Werner & Pfleiderer Corp.:
Plastics Add Twist to Recycling Equipment, by K. W. Bennett, June 15 p 47

Western Gold & Platinum Co.:
Ceramics Begin to Answer Industry's Burning Questions, by A. M. Greene, June 22 p 48

Westinghouse Air Brake Co.:
Buyers Now Seek Service, Not Inventories, by G. J. McManus, Feb 24 p 47

Westinghouse Electric Corp.:
Buyers Now Seek Service, Not Inventories, by G. J. McManus, Feb 24 p 47
Exotic Sources of Electricity Still in the Future, Mar 2 p 23
Hand-Held Flameless Torch Reaches 1100°F, Mar 9 p 27
Job Erosion: Win Some; Lose Some, Apr 13 p 19
Materials Handling to Outdo NC on Machine Tools? by J. E. Sandford, June 1 p 41
Maxis to Minis, Computers are Calculating Gains, by K. W. Bennett, May 11 p 39
Nuclear Equipment: Oh those Shipments! by J. M. Beattie, Mar 23 p 42
The Price Controls Squeeze Play? by K. A. Kaufman, K. W. Bennett and G. J. McManus, May 11 p 35
There is No "Energy Crisis", But . . ., by B. D. Wakefield, Mar 9 p 49
Utilization: More May Not be Better, by G. J. McManus, Apr 27 p 39

Westinghouse Power Systems Co.:
Seaborne Power Plant Ready for Launching, Feb 24 p 25

Wheelabrator-Frye, Inc.:
Inventories: Recovery's Missing Link, by K. A. Kaufman, G. J. McManus and R. A. Wilson, June 8 p 44
Pollution Problems? Rent-a-System, by G. J. McManus, June 8 p 50

Wheels
Hot Formed Railroad Wheels in Four Minutes, May 25 p 33

S. S. White Industrial Products Div.:
Can't Cut Hard Material? "Blast" it Away, Apr 13 p 63

White Motor Corp.:
The Search for America, Inc., by G. J. McManus, Jan 6 p 95

W. A. Whitney Corp.:
Handling Taken Out of Beam Fabrication, by J. J. Obrzut, Feb 24 p 61
Navy Buys First U. S. Built NC Nibbler, by B. D. Wakefield, Apr 20 p 94

Whittaker Corp.:
Powder Coating Line Scores Hit First Time, by J. J. Obrzut, May 4 p 84

Wilkinson, Sedgwick & Yelverton
Will '72 be Year of the Manufacturing Manager? Jan 6 p 27

Williams Research Inc.:
GM's Pushing to Develop Turbine Auto? by D. N. Williams, Jan 27 p 23

Wilputte Corp.:
Heat of Pollution Drive Hits the Coke Oven, by G. J. McManus, June 29 p 77

Winnebago Cedar Buildings, Inc.:
Farm Area's New Crop-Factories, by K. W. Bennett, Feb 10 p 65

Wire
Cored Fine Wire Solves 'Cold Shut' Problems, by R. R. Irving, Feb 24 p 63
A New Era for Rod Mills: Build One or Get Out! by G. J. McManus, June 22 p 41
Wiremen Eye New Mills and Materials, by B. D. Wakefield, May 4 p 79

Wolff Metal Service
January Thaw Hits Metalworking Orders, by K. W. Bennett, Jan 27 p 46

Peter Wolkonsky
OSHA's Forgotten Man Raises an Angry Cry! by C. J. Suchocki, May 4 p 25

Wolverine Tube Div.:
Porous Stainless Tubing Clarifies Water, Apr 27 p 27

Wright Associates
Recovery '71: Metalworking Ratios Say No, by J. D. Baxter, June 15 p 46

Paul Wurth Co.:
Furnace Feed Simplifies Loading, by G. J. McManus, Apr 27 p 55

X

X-Ray Inspection
NDT Methods Get Attention of Automotive Men, Jan 27 p 61
Newport News Gives X-Ray Top Priority, Jan 20 p 34

Y

Youngstown Sheet & Tube Co.:
Abel Hails 'Pro' Pay Plan; Rips Construction Hikes, Mar 2 p 19
Fast Data Entry—Fast Mill Feedback, Feb 17 p 57
The Puzzle of Productivity, by G. J. McManus and J. M. Beattie, Mar 9 p 40

Z

Zegers, Inc.:
Paint Line in Harmony with Environment, by B. D. Wakefield, Mar 23 p 56

Zenith Radio Corp.:
Great Expectations for U.S. Exports? by K. W. Bennett, Jan 6 p 88

W. E. Zimmie, Inc.:
Planning on Managing? Here are Some Tips, by P. J. Cathey, May 25 p 31

Zinc
What are the Price Prospects for Copper, Lead, Zinc? by James Beizer, June 29 p 109
Zinc: My 'Bounty' Lies Over the Ocean? by James Beizer, Apr 13 p 48
Zinc Revives Old Refrain on Price Controls, by James Beizer, Mar 23 p 45

Zinc Institute
Zinc: My 'Bounty' Lies Over the Ocean? by James Beizer, Apr 13 p 48

AUTHOR INDEX

B

Baxter, J. D.
Durables Catalogs Low; Time to Stock Up? Jan 13 p 42
Multinationals: Labor Makes War! Jan 27 p 45
Plant Costs aren't Far Out in Far East, May 25 p 76
Recovery '71: Metalworking Ratios Say No, June 15 p 46
U.S. Plays White Chips in Blue-Chip Game? Mar 9 p 35
Want Price Rise? How's Your Productivity Rate? Feb 10 p 74

Beattie, J. M.
Annual Meetings are Not Always Sleepy Affairs . . ., May 4 p 69
The Cheapest Solution in Town . . ., Feb 3 p 39
Coming: Electric Auto Courtesy the AEC? Apr 27 p 41
Construction: Have Your Cake and Eat it, Too! May 4 p 19
Dollar Devalued by Bored Workers, Feb 24 p 52
From Russia with Love—If You Have a License? June 22 p 38
Industry's New Watchdog: The Insurance Company, Mar 16 p 58
Is Devaluation Another Economic Myth? Jan 27 p 43
Is U. S. Technology Slip Really Showing? May 4 p 63
The Jury is Out in OSHA Study of Compensation, Mar 16 p 61
1976: A Brotherly Shove Needed? Jan 20 p 26
Nuclear Equipment: Oh those Shipments! Mar 23 p 42
The Puzzle of Productivity, Mar 9 p 40
Spare a Thought for the Archie Bunkers . . ., May 11 p 35
Taking the Spaghetti-Making Out of Copper, June 1 p 67
Those Wonderful Men and Their Amplifying Machines, May 25 p 67
When Energy Crunch Crunches, Apr 27 p 40

Beaudet, Gene
About "The Search for America, Inc.", Jan 6 p 5
Acupuncture and the Value-Added Tax, Apr 20 p 5
Archie Bunker Meets "The Bull of the Woods", June 1 p 5
The Best is Yet to Come, June 22 p 43
Business and the Nostalgia Bit, June 22 p 5
Curb People's Expectations? Boost Them! Jan 20 p 5
Does the GNP Show Happiness? Feb 10 p 5
Don't Forget, The Worst Fears are Imaginary, Feb 24 p 5
A Fresh Look at the Environment, Jan 13 p 5
A Full Employment What? Feb 3 p 5
George Wallace and Hartke-Burke? Apr 6 p 5
Good for You Herman! Feb 17 p 5
Have We Really Turned the Corner? Apr 27 p 5
He Says It's Hogwash and He's Sick of It, June 8 p 5
If I Had a Million, May 25 p 5
Is Our Attention Span Narrowing? Jan 27 p 5
Just for Once, This Would be Great! May 11 p 5
The Loopholes in the Loopholes, June 29 p 5
Machine Tool Market: Going, Going . . ., Mar 30 p 50
1972: "This May Sound Crazy, But . . .," Jan 6 p 83
No Wonder They Flipped the Dial, June 15 p 5
Not with My Taxes You Don't! May 4 p 5
Now, Before You Choose Up Sides . . ., Mar 9 p 5
Productivity Begins at Home, Mar 30 p 5
SSCI Orders Indicate Recovery Continues, May 18 p 48
Stop the World? Not Just Yet! Mar 23 p 5
The Terrors and Promises of Spring, Apr 13 p 5
This is No Powder Puff Derby, Mar 16 p 5
This May Not Do You One Bit of Good, May 18 p 5
Who's Running Things Around Here? Mar 2 p 5

Beizer, James
Aluminum, Copper, Cadmium-Talk About Prices, Dumping, May 25 p 71
Aluminum Gets Set to Kiss the Bad Old Days Goodbye, Apr 13 p 101
Aluminum Resets its Sights on 10 Pct a Year Growth Rate, Mar 23 p 71
Aluminum Saves More Hot Air than Critics Generate? June 15 p 73
Aluminum, Stainless Prices: Going Down the Up Stairs, May 11 p 41
Anaconda's Future Profits Out of Place? Mar 30 p 55
Asarco Feels the Teeth of Price Controls, Apr 20 p 125
Asarco Leads Lead Price Increase, Feb 10 p 121
Australia Shakes Off Role as "Quarry for the World", Apr 6 p 77
Auto Imports: Less Worrying and Buy U.S., Apr 6 p 41
Big Mill, Demand Boosts Aluminum Hopes for Year, May 25 p 103
Brass Mills Took Turn for the Worst in 1971, Feb 24 p 75
Copper Comes a Cropper in Arizona Smelter Case, Jan 27 p 48
Copper Gains a Little More Breathing Room, June 1 p 27
Copper Market is Thinning Down in Strength, Mar 30 p 85
Copper Supply Outlook Gives Producers the Shakes, May 18 p 83
Copper Supply: When is Enough Not Enough? Apr 20 p 125
Copper Waits, and Waits and Waits for a Better Economy, Feb 3 p 71
Discount Malady Overcomes Nickel Prices, Mar 9 p 69
Everybody Has to Lose Arizona Copper Case, Jan 13 p 37
The Exhausting Problems of Resources, Apr 20 p 70
The Grand Old Party and the 'Copper Barons', Feb 17 p 69
The Helter-Skelter Smelter Case Keeps on Rollin' Along, June 15 p 73
It's Price Change Time—and Phelps Dodge Does it Again, Mar 2 p 65
Japanese Bearings—All the Way from Chatsworth, Calif.? June 29 p 67
Kaiser Trying for Better Prices on Aluminum, Mar 16 p 123
Kennecott's Top Men on Supply, Price, Pollution, Jan 20 p 29
London's Copper Price Pendulum Gives U.S. Producers the Jitters, June 8 p 79
New Line on Silver: It isn't So Clouded, June 22 p 65
Nickel Orders on the Way Up, Prices, Too? Jan 6 p 165
Nonferrous Chiefs See Improvement in Business Outlook, May 11 p 73
Nonferrous Earnings Plunge to Lowest Level in Years in Sluggish Economy, Apr 27 p 45
Nonferrous '71: Crying All the Way to the Bank, Feb 17 p 45
Nonferrous Shakes Doldrums in First Quarter, May 4 p 111
Not All Reasons for Use of Aluminum are Light Weight, Jan 13 p 65
Phelps Dodge Slates New Western Smelter, Mar 16 p 56
Pollution Hearings: Politics-2, Copper-1, Mar 2 p 34
Pollution: Trade-off under Protest, Feb 10 p 68
Price Boosts on Cadmium Led by Bunker Hill, Mar 16 p 123
The Problems with Having a Smelter as a Neighbor, Jan 20 p 47
The Silver Industry Takes Another Stab at Price Predicting, Feb 10 p 121
Warning Signals for Aluminum Start to Flicker, Jan 20 p 25

What are the Price Prospects for Copper, Lead, Zinc? June 29 p 109
When First Quarter Earnings are Like Democratic Primaries, Apr 27 p 71
Will Mining Come Out of the Dark with a Truth Squad? Jan 27 p 69
Zinc: My 'Bounty' Lies Over the Ocean? Apr 13 p 48
Zinc Revives Old Refrain on Price Controls, Mar 23 p 45

Bennett, K. W.

A/C: Rare Bird that's Drawing a Crowd, May 4 p 65
Appliance Makers Caught with Inventories Down? Mar 2 p 32
City Pollution Backlashes on Cap-ito(a)l, June 1 p 38
Coil Coaters Back on Growth Curve, but See No Technical Breakthroughs for Year, Feb 3 p 56
Cryogenics is Not a Fragment of Scrap's Imagination, May 18 p 47
Crystal Ball '73: New Money Squeeze? June 29 p 63
The Dawning of a New Age of Electronics? Feb 3 p 40
Drop-Out Manager Turns on Controls, Apr 13 p 49
Farm Area's New Crop—Factories, Feb 10 p 65
Giants Go, but Small Wares Prosper, Mar 23 p 44
Great Expectations for U.S. Exports? Jan 6 p 88
Is it a Metal? Is it a Gas? Yes-it's Supersomething, Jan 13 p 43
Is Licensing in Danger from Exports? Mar 16 p 60
It's Prime Time for Consumer Electronics, June 22 p 35
January Thaw Hits Metalworking Orders, Jan 27 p 46
Job Market Starts to Crack Open, Apr 27 p 37
Justifying New Machines: It's Not So Tough, Feb 24 p 56
A Light Appears at the End of Tunneling Market, June 29 p 66
Materials Handling is in an Uplift, Apr 20 p 72
Maxis to Minis, Computers are Calculating Gains, May 11 p 39
Mowers Cash in on 'Greening' in America, June 8 p 48
New Shipbuilding Orders Carry Metalworking Cargo, Mar 30 p 48
Plastics Add Twist to Recycling Equipment, June 15 p 47
Population Explosion—Industrial Robot Style, May 25 p 67
The Price Controls Squeeze Play? May 11 p 35
Ryerson Rides Big Plastic Pipe into Pollution Market, May 11 p 37
Special Machine Orders Boom in Early '72, Mar 30 p 49
Tomorrow's New Products, Today, by the Hunch Bunch, May 18 p 49
Transfer Machine Builders Line Up for Foreign Stations, Apr 6 p 46
U.S. Manufacturers Out for Blood in Export Game? Mar 9 p 36
Unlock Dollars Frozen in Inventories, Apr 20 p 67
Use Middle Managers to Key on Profits, Apr 13 p 53
Water, Water Everywhere—Even Some to Drink, June 15 p 43
Who Said this Industry is De-Pressed? June 22 p 40

C

Cathey, P. J.

Boost Productivity of All—Including the Boss? May 18 p 27
Coming: Electric Auto Courtesy the AEC? Apr 27 p 41
Financing: Strong, Clear Fronts, with Few Storm Clouds, Mar 2 p 37
Future Managers: Spot Them Fast, Challenge Them Often, June 15 p 23
Guess Who—Among Managers—Gets Blame for Recession? May 25 p 31
It'll be Great in 1990 if . . ., Feb 17 p 44
Lots of BAD Ideas Make Cost-Saving Good, Mar 9 p 44
Managers Arise to Defend Technology from the Wolves, Apr 20 p 27
Planning on Managing? Here are Some Tips, May 25 p 31
Productivity: Like Motherhood, But—, June 1 p 39
Restless Fast-Track Men are Entering Too Many Races, Apr 27 p 25
Wanted: For Crimes Against Business—White-Collar Mafia, Mar 2 p 35
When Energy Crunch Crunches, Apr 27 p 40

Causey, W. B.

Inertia Welds Take on Bimetallic Fasteners, Apr 6 p 63

D

DuMond, T. C.

Bearings Seek Economy in New Methods, Apr 27 p 51
ESR Outperforms VAR in Making Superalloys, May 11 p 49
Federal Funds Accelerate Mass Transit, Mar 23 p 52
NR Works to Adapt Space Lore, Jan 13 p 55

G

Greene, A. M.

Ceramics Begin to Answer Industry's Burning Questions, June 22 p 48
Computers' Big Payoff for Small Businesses, Mar 30 p 63
Data Banks Serve Industry's Need to Know, Apr 6 p 57
High-Velocity Jet Keeps Furnace Fired with Uniform Heat, June 1 p 54
President Says 'Blast Off' for Space Shuttle, Jan 13 p 45

H

Hockenberry, S. H.

Fill the Management Void in R&D Planning, Mar 23 p 48
Managers Profit from Financial Awareness, Mar 2 p 39

I

Irving, R. R.

Aerospace Alloys March into New Markets, Jan 13 p 49
Cored Fine Wire Solves 'Cold Shut' Problems, Feb 24 p 63
F-14 Puts Advanced Technology to the Test, June 15 p 55
From Sweden: Ferroalloys without Air Pollution, June 15 p 44
Positioners Take the Downtime Out of Welding, Mar 30 p 60
A Third Coated Steel is Ready to Roll, June 1 p 52

J

Jamieson, Robert

Canada Grumbles about U. S. Use of DISC Companies, May 11 p 25

K

Kalb, W. J.

Reporter's Notebook: The Death of Soul, May 4 p 66

Kaufman, K. A.

Administration Says Profits Show Price-Control Breakdown, Apr 20 p 21
Are Odds in Favor of GE Winning Antitrust Suit? May 25 p 25
Are Wage-Price Controls a Portend? Jan 27 p 21
Budget: Politics is Faster than Revenues, Jan 27 p 47
Budget Red Ink Still Putting a Stain on Economy? Feb 10 p 23
Burns Assures Economy of Fed Feed, Feb 17 p 46
Burns Gives Floating Tax Credits Some More Resuscitation, Mar 16 p 23
Consumer Union Fires Torpedo at Imports, June 1 p 42
The Exhausting Problems of Resources, Apr 20 p 70
Eximbank Urges Sales Effort Push in Japanese Markets, May 4 p 21
FTC is After Cereal Makers as Auto Warm-Up? Feb 3 p 21
Federal Red Ink May Put a Blot on Inflation Curb, June 29 p 25
Gas Ruling Drains FTC Power Drive, Apr 13 p 21
Inventories: Recovery's Missing Link, June 8 p 44
Iron Curtain Creaks Open for Tool, Die Work, June 22 p 39
Is Fed Mixing Money with Politics? Jan 6 p 21
Metals Price Hikes Blow Economic Cool of Adminstration, Mar 23 p 41
Mills Tax Bill Makes Some Mountains on Capitol Hill, June 15 p 20
Nader Comes Up with Another Taxing Problem, May 18 p 21
Needed: All-Out Strategy for U. S. Growth, May 4 p 73
New Expropriation Rules are Pay or Get Cut Off, Jan 27 p 21
Nixon Economists Desire More 'Stimulation' in '72, Jan 13 p 23
Nixon—Industry Combo Fail to Dent New Pollution Law, Mar 23 p 21
Nixon Said that ($38B) about Deficit, Now it's this ($26B), May 11 p 22
Nixon Won't Bring Back More Trade with China, Feb 24 p 21
No Chance for Job Shop Price Exemption Approval, Apr 6 p 43
Now it's the Taxpayers Who Can Stop Inflation, June 22 p 19
Outlook: Everything Coming Up Roses? May 4 p 67
Pension Bill: Going Back into Retirement? May 18 p 43
Political Smoke Clouds Pollution Issue, Feb 24 p 49
Politics or Not, there's a Tax Increase Coming . . ., June 1 p 23
Price Commission Cracking Down on Price Boosts, Apr 27 p 19
The Price Controls Squeeze Play? May 11 p 35
'Product Quality' is Buyer's Concern, Says OMB Official, Apr 6 p 21
Productivity Means Keeping Up with Jones', Mar 30 p 47
Quota: Not the 'Whole' Thing, But . . ., May 11 p 38
Recovery: Optimism from Federal Seers, Mar 9 p 21
Rhodesian Chrome: Don't Import, Import, Don't . . ., June 1 p 23
Safety Agency: For the People, by the People, of the . . ., Mar 30 p 21
Social Security: The Wor$t is Yet to Come, June 22 p 19
Steel to Connally: Sorry to See You Go, John? May 25 p 25
Tax Reform in Election Year: A White Elephant? Feb 17 p 21
The Tax Reformers: Or You Have to Hand it to Them! June 8 p 25
Taxes: Governors' Club Fights VAT 72, Mar 2 p 20
Trade Breaks for U.S. Trigger Release of Gold Price Bill, Feb 17 p 43
Transpo '72: Showcase for What's Not New, June 1 p 40
Value-Added Tax: A Pox at the Ballot Box, Jan 20 p 12
Wage-Price Controls Assured Long Run by Administration, Feb 3 p 41
Washington '72: Color it Political, Jan 6 p 90
Weak EEDC Gets Anti-Bias Power Injection, Mar 2 p 20
What's Behind Machine Tool Curtain? June 8 p 46

Mc

McManus, G. J.

Armco: Generalist-Specialist Looks Ahead, May 18 p 57
Bethlehem Ponders Huge Blast Furnace, Mar 30 p 65
Bethlehem—State Coke—Control Pact Bets on Tomorrow, Mar 16 p 57
Buyers Now Seek Service, Not Inventories, Feb 24 p 47
Canmaking's New Battleground: The D & I Process, June 29 p 68
Coming Soon: French LWS Process for Steelmaking, June 29 p 80
Defense Budget Needed Rx for Wheezing Aerospace, Feb 3 p 43
Direct Reduction is Not Dead, Feb 10 p 70
Don't Sell Phase II Short, Asks USWA's Abel, Feb 3 p 45
EPA: Shake Things Up and Worry Later, Mar 2 p 36
European Companies Joining Hands on Large Jobs, May 25 p 29
Furnace Feed Simplifies Loading, Apr 27 p 51
Has the Import Situation Really Gone Critical? Feb 10 p 69
Heat of Pollution Drive Hits the Coke Oven, June 29 p 77
Hidden Dangers Lurk in Buyer's Market, Says P. A. Chief, Apr 6 p 45
How to Win Friends and Influence Buyers? Apr 20 p 73
Industrial Buyers 'Policing' Price Moves, Jan 20 p 24
Industries' Latest Problem—Profits, Mar 30 p 45

Industry Opens its Purse, Mar 23 p 39
Inventories: Recovery's Missing Link, June 8 p 44
Job Market Starts to Crack Open, Apr 27 p 37
Korf Steel Group: To Hamburg from South Carolina, with Profit, May 4 p 68
A New Era for Rod Mills: Build One or Get Out! June 22 p 41
Pollution Problem? Rent-a-System, June 8 p 50
The Price Controls Squeeze Play? May 11 p 35
The Puzzle of Productivity, Mar 9 p 40
Quotas: 'About the Best We Could Get', Jan 20 p 28
The Search for America, Inc., Jan 6 p 95
Sharon Midi-Mills Show Leg Up on Profits, Mar 30 p 51
The Smaller, the Bigger the Gripe? Feb 17 p 42
Spend Now or Miss the Boat? Apr 6 p 44
Steel Quotas: Are Agreements in the Mail? Apr 13 p 43
Steel Summary: 'Grand Tour' of Technology, June 15 p 21
Steel's Iron Mine Can be the City Dump, Mar 23 p 57
Steel's Profits Go Overseas, Feb 3 p 42
Tax Reform: From Feudal to Futile? May 18 p 46
U. S. Manufacturing: 10, 9, 8, 7, 6, 5, 4, 3, 2 . . .? May 15 p 69
U. S. Steel Men Intrigued by Japan's Huge Blast Furnace, May 18 p 59
Unraveling the Porter-Fisston-Nicholson Caper, Apr 13 p 47
Utilization: More May Not be Better, Apr 27 p 39
Want an Edge in Exporting? Try a DISC, Apr 6 p 51
Where there's Smoke . . ., June 1 p 42

M

Malim, T. H.

Oil Squeezes Out Low-Cost Forms, Jan 20 p 37

N

Neal, H. R.

All Things Considered, It Could Have Been Worse, Apr 20 p 79

Nelson, H. M.

Racing's Triple Crown: Technology vs. Mechanics, June 29 p 71

O

Obrzut, J. J.

Coatings Give Plastics Raft of New Traits, Mar 16 p 71
Control Pollution Without Capital Outlay, Mar 2 p 48
Handling Taken Out of Beam Fabrication, Feb 24 p 44
High-Speed Grinder Has Continuous Output, May 4 p 86
New Fiber Has Aircraft Industry Astir, June 8 p 66
Powder Coating Line Scores Hit First Time, May 4 p 84
Solid State Joints Formed Under Electromagnetic Pressure, Apr 20 p 92
Teflon Has a Knack for Solving Problems, June 22 p 51
Will Metals' Recycling Need a Social Price Tag? Jan 27 p 54

P

Patton, W. G.

Automakers Assign Top Priority to Weight, Feb 17 p 52
The B-1: A New Approach to Building Planes, June 15 p 59
Redesign in Carbide Guides Doubles Life of Honing Stones, Jan 20 p 36
What's Behind the Successful Drive for Silicone Parts? May 25 p 84

Perry, D. C.

Aerospace Alloys March into New Markets, Jan 13 p 49

Pressley, Samuel

Black Capitalism: Does it Really Work? June 15 p 50

S

Sandford, J. E.

Basic Machine Tool Builder Continues Challenging Imports, Mar 9 p 42
Detroit Plugs in to Solid State, Feb 3 p 50
GM Plants Seeds to Develop CAM Machinery, Feb 24 p 53
Increasing Output is Job for Machines-Not People, Feb 10 p 71
Low-Cost NC Closes the Loop, May 25 p 87
Materials Handling to Outdo NC on Machine Tools? June 1 p 41
The New Technology in Low Cost NC, June 1 p 48
New Tools From New Materials, Apr 13 p 59
Programmed Controls Spark New Detroit Era, Feb 10 p 81
Time Sharing Spreads a Wider Net, June 8 p 62

Shah, Raymond

Cylinder Heads Die Cast at 40 per Hour, May 18 p 58

Suchocki, C. J.

ERTS: Resource Hunter from Outer Space, June 29 p 29
Four-Day Week Needs Game Plan for Success, Mar 16 p 65
Gas War—or How to Keep the Lead In, May 18 p 25
Got a Secret? So Protect It! June 15 p 22
Labor '72: Planning Bumps Demanding, Jan 13 p 40
OSHAian Eye: To Catch a Thief, June 15 p 22
OSHA's Forgotten Man Raises an Angry Cry! May 4 p 25
Steel Can Rest Comfortably After Tank-Car Diagnosis, May 25 p 72
To OSHA from Labor: Happy Unbirthday, Apr 27 p 42
UAW: Only the Name's the Same, May 4 p 66
Water Filters: High-Rate Cleanup; Low-Cost Tab, June 29 p 29

W

Wakefield, B. D.

Another Safety Problem Rears its Head, Apr 6 p 59
Carbide Saw Gives U.S. Import Blocker, Apr 13 p 65
Chicago Mill Ends Leaker Problem in Pouring Big Ingots, Jan 27 p 61
Coil Coaters Back on Growth Curve, but See No Technical Breakthroughs for Year, Feb 3 p 56
Is There a Better Way to Build Pipelines? Mar 2 p 46
Magazine Holds 72 Tools for NC Punching, Jan 20 p 38
Make Your Heat Treating Furnace Hotter, Apr 27 p 58
Material Feeds Past the Tooling in New German Bar Machine, May 25 p 88
Multiple Linkage Press Drives Looking Up, May 18 p 62
NDT: Process Control or Legal Defense? Jan 27 p 60
Navy Buys First U. S. Built NC Nibbler, Apr 20 p 94
Old Crane Steps Aside for Straddle Carrier, Mar 30 p 67
Paint Line in Harmony with Environment, Mar 23 p 56
Pinpoint Noise Problems at a Glance, Mar 16 p 74
Press Brake Forming Can be Fast and Safe, May 18 p 60
Shot Peening Extends Fatigue Life of Tractor Parts, May 18 p 57
Swedish Drill Fills Gap in U. S. Market, Feb 24 p 62
There is No "Energy Crisis", But . . ., Mar 9 p 49
Value Engineering: It's Come a Long Way, Mar 16 p 75
Wiremen Eye New Mills and Materials, May 4 p 79

Williams, D. N.

Aluminum Hoods Catch GM's Eye for '73 Cadillac? June 8 p 47
Auto Emission Control: Suppliers Heyday? Apr 13 p 45
Auto Imports: Less Worrying and Buy U.S. Apr 6 p 41
Automakers Put Fat Parts List on Diet, June 22 p 37
Auto News of the Future: Or Let's Start Horsing Around, May 4 p 23
Big 3 in Battle for New Market in Subcompact Wagons, Feb 24 p 23
The Bug and the Beetle Become U. S. Movie Stars for Productivity, Mar 9 p 40
Buick Sparking Efforts to Meet Emission Laws, Feb 10 p 25
Cadillac Begins GM's Standardization of Engines Plan, May 11 p 24
Car Computers: I'll Drink to That!' June 8 p 27
Car Interiors: All the Jazz is Moving to the Inside, June 29 p 27
Chrysler's Controls: Or Now it's Phase I for Fasteners, Apr 6 p 23
Chrysler's Plant Pinned on New Axle Line, Mar 16 p 25
Detroit in Driver's Seat as Trucks Boom, May 25 p 70
Detroit: Things are Better but Not Best, Apr 27 p 21
Does Ford Have Some ESP on the ESV Program? May 18 p 23
Electric Disc Break Beats the Drums for Boat Trailers, Jan 13 p 25
Emissions: An Exhausting Game of Politics, Apr 13 p 23
Ford: Give Us Your Junk Cars, Your Old Foam . . ., Apr 20 p 23
Ford Reduces Shutdown Time for Model Changeover, Jan 6 p 23
GM and Ford: Mini-Trucks for Mini-Countries, June 1 p 25
GM Pushes Back Wankel Production, Feb 24 p 50
GM Supplies: Anything We Can't Do You Can Do Better? June 15 p 21
GM Turns Scrap Turnings into PM Parts, Feb 24 p 65
GM Wankel Tooling Grinds to a Start, June 1 p 36
GM's Pushing to Develop Turbine Auto? Jan 27 p 23
GM's Trucks: First Place or Bust? Jan 20 p 13
Gas Engine's Life Far from Over, Says Estes, Mar 23 p 23
Greetings, Your Chevy is About to be Recalled! Mar 2 p 21
Grinder Smooths Wankel Production, June 22 p 53
How to Catch a Thief-by Chrysler! Feb 3 p 23
Imports: The British are Staying . . ., Feb 17 p 23
Job Market Starts to Crack Open, Apr 27 p 37
Lordstown Shootout: Cost-Cutters vs. Labor, Feb 3 p 38
NEP, Devaluation Speed Pinto Engine Naturalization, Jan 20 p 27
Nixon Trucking Bill: 'To Brink of Disaster and Beyond . . .'? June 15 p 45
Powder Keg Explodes and Ford Sets Up 'War Room', June 15 p 21
Profit Crunch Tames Union Urges, Feb 10 p 67
Roadmap for Exhaust Control Should List Six-Stop Trip, Mar 23 p 23
Sentinel Program on the Lookout for GM Defects, Mar 9 p 23
Somewhere in All these Lemons there May be a Creampuff, Jan 6 p 85
Sure, the Automakers are at Transpo, June 1 p 40
Thinking Energy is "No Fault" at GM, Jan 27 p 23
Unbalanced Parts are Centerless Ground, June 8 p 64
VW on Safety: Air Bag, Nein; Gas Belt, Ya, May 25 p 27
Wankel Barbs are Competitor Sour Grapes, Says Mazda, June 22 p 21
Wankel Engine Revs Up Tooling Orders, Mar 16 p 55
Wankel, Wankel, Little Car, How They Wonder How You Are, Mar 30 p 23
Welding is a Domestic Affair, Apr 20 p 74
Will the Real Industry Safety Cop Please Stand! June 30 p 64
Working May be Hazardous to Your Health, Jan 20 p 22

Wilson, R. A.

Coal's Future: Dig We Must, but Dig We Can't, May 18 p 45
Cold Former from Germany Makes U.S. Debut, June 22 p 54
Cold Forming Occupies a Hot New Turf, May 11 p 52
Election Year '72 Forming as Profit Year for Tool Builders, Jan 6 p 86
Fluxless Brazing Goes High Production, Apr 27 p 56

Ford Flat Rock Ready to Roll, Jan 27 p 58
Forgers and OSHA: Bad Housekeeping Seal of Approval? Apr 6 p 47
Foundry Future Rides on New Equipment, Apr 20 p 87
Get it Together with Automatic Assembly, June 29 p 82
Hire Top Managers Who Know Buyer's Problems, June 1 p 44
How Much Capacity is Really Useable? June 15 p 48
Inventories: Recovery's Missing Link, June 8 p 44
Job Market Starts to Crack Open, Apr 27 p 37
Lordstown Shootout: Cost-Cutters vs. New Labor, Feb 3 p 38
Lucas Fields its Front Four, Feb 3 p 53
Machine Builders: Again, Hopeful Hearts, Mar 2 p 38
Machine Tool Market: Going, Going . . ., Mar 30 p 50
Machine Tools: Caveat Gets Empted, May 11 p 40
New Cutting Tool Material Moves into Production Stage, May 11 p 54
New Products Boost Machine Builders, June 29 p 65
OSHA Gets Welders up Tight About Smoking, Feb 24 p 51
OSHA Press Rules-Fuss, but Few Orders, May 25 p 73
Ore Men Iron Out Their Problems, Apr 13 p 46
Pollution Control: Rinse Out a Profit, Feb 17 p 48
The State of Flux in Static Drives, Mar 2 p 43
TRW Seeks Answer to Cost Squeeze in World's Largest Mechanical Forging Press, Feb 17 p 56
Too Much Month Left at the End of the Money, Feb 17 p 40
Tool Builders Tap Pent-Up Demand, Feb 3 p 44
Tool and Die: Starting on the Road Back, Jan 27 p 50
Tooling Materials Push Lathe Limits, Mar 9 p 38
Value Engineering Brings CNC into Focus, May 25 p 81
What's Behind Machine Tool Curtain? June 8 p 46

Iron Age

a Chilton publication
One Decker Square ■ Bala-Cynwyd, Pa. 19004

Printed in U.S.A.